

**Article 9.—CONSTRUCTION,
MAINTENANCE AND USE OF
MAUSOLEUMS**

28-9-1. Burial structure above ground.

Any person, firm or corporation desirous of constructing any burial structure which shall be wholly or in part above ground shall apply to the Kansas state department of health for a permit for such construction. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-2. Application for permits. Application for permits for such construction shall be made on forms furnished by the state department of health and shall be accompanied by detailed plans and specifications in triplicate. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-3. Secretary issue permit in triplicate. On approval of said plans and specifications for the proposed burial structure by the engineer of the department, the secretary shall issue a permit in triplicate for the construction, and shall send two copies of the permit, approved plans and specifications to the party who makes application, and retain one copy for the files of the department. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-4. Embalming of dead bodies. No dead body shall be interred or deposited in any public mausoleum or private mausoleum of more than two crypts unless the body has first been embalmed in compliance with recognized embalming practice. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-5. Details of burial structures. In the design of burial structures the following details must be included:

(a) The structure must be so designed that each cell or crypt shall be readily accessible for inspection by persons authorized to make such inspection before final interment.

(b) Each crypt shall be so designed that it can be sealed to prevent odors from reaching the public space or corridor of the mausoleum.

(c) In case a ventilation and drainage system is provided, the system must be one acceptable to the department. The minimum size of pipes for either ventilation or drainage shall be 1½ inches and the ventilation or drainage from one crypt shall not pass through another.

(d) In case a sealed crypt is used without pipes

for drainage or ventilation the inner surface of the crypt and crypt sealing slab shall be made air and moisture proof by a protective coating of an approved paint. A paint having a bituminous base is recommended and if necessary to proper drying and bonding to the concrete surface, it shall be applied hot.

(e) No live air spaces smaller in size than will allow for thorough inspection and repairing of joints from the inside of said air spaces will be allowed, except the pipes for ventilation and drainage of crypts.

(f) Hollow walls shall be sealed so as to make the air space “dead.”

(g) Any burial structure intended for public or community use shall be provided with some type of heating system acceptable to the department.

(h) In the case of public mausoleums, or those with a corridor or chapel, suitable ventilation, independent of the above, and directly connected to the outside air, shall be provided.

(i) Special attention will be given to such details as: Depth and width of foundations; size and spacing of reinforcing steel; materials and methods used in construction of roof; permanence of material used for exterior of walls as determined by these for absorption of moisture; materials used for window and door sash, grills, gates, etc.; materials and method used in anchoring or tying walls together where they are made up of two or more independent walls, materials for concrete plaster, mortar, etc. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-6. Individual mausoleums; approval of plans, specifications and testing of materials. In the case of individual mausoleums, the permits issued by the department shall be a license to manufacture. Any deviations from the approved plans and specifications must be approved in writing by the engineer for the department. Inspections will be made of the manufacturing processes and of field installations with special attention being given to all factors which affect the permanence of the structures. When necessary to determine the permanence, all or any part of one or more mausoleums, or test specimens from the mixes used, shall be delivered to a laboratory for testing. The transportation and testing shall be an expense of the manufacturer and shall be done as directed by the engineer for the department. Permanent identification of the manufacturer shall be stamped in an accessible place

on the cover and the vault along with the date of manufacture. Such other records shall be kept as are found necessary by the department. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-7. Individual mausoleums; replacement of structure or parts thereof. Whenever the failure of one of these mausoleums causes offensive odors or effluvia to arise therefrom, and such failure comes to the attention of the department, the manufacturer shall be required to replace or repair the structure or the defective portion. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

28-9-8. Individual mausoleums; revocation of permit. The permit may be revoked for cause upon notice to the manufacturer by the secretary of the board. (Authorized by K.S.A. 17-1324; effective Jan. 1, 1966.)

Article 10.—SANITARY CONDITIONS AROUND RESERVOIRS

28-10-1 to 28-10-13. (Authorized by K.S.A. 1965 Supp. 65-187; effective Jan. 1, 1966; revoked Jan. 1, 1969.)

28-10-14. Reserved.

A. Sanitation Zone Boundaries

28-10-15 through 28-10-33. (Authorized by K.S.A. 1969 Supp. 65-187; effective, E-68-23, Aug. 9, 1968; effective Jan. 1, 1969; amended Jan. 1, 1970; revoked March 23, 2001.)

28-10-34 through 28-10-35. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1969; amended Jan. 1, 1970; revoked March 23, 2001.)

28-10-36. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1970; revoked May 10, 1996.)

28-10-37. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-38. (Authorized by and implementing K.S.A. 65-187; effective Jan. 1, 1973; amended, T-84-40, Dec. 21, 1983; amended May 1, 1984; revoked March 23, 2001.)

28-10-39. (Authorized by K.S.A. 1972 Supp. 65-187; effective Jan. 1, 1973; revoked March 23, 2001.)

28-10-40 to 28-10-41. (Authorized by K.S.A. 1972 Supp. 65-187; effective Jan. 1, 1973; revoked May 10, 1996.)

28-10-42 to 28-10-74. Reserved.

B. General

28-10-75. (Authorized by K.S.A. 1969 Supp. 65-187; effective, E-68-23, Aug. 9, 1968; effective, E-69-6, Jan. 8, 1969; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-76. (Authorized by K.S.A. 1969 Supp. 65-185, 65-187, 65-189e; effective, E-68-23, Aug. 9, 1968; effective, E-69-6, Jan. 8, 1969; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-77. (Authorized by K.S.A. 1969 Supp. 65-187, 65-189f; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-78. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-79. (Authorized by K.S.A. 1969 Supp. 65-187, 65-189c; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-80. (Authorized by K.S.A. 1969 Supp. 65-187, 65-189c, 65-189d; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-81 through 28-10-83. (Authorized by K.S.A. 1969 Supp. 65-187, 65-189c; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-84. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-85. (Authorized by K.S.A. 1969 Supp. 65-187, 65-189c; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-86 through 28-10-88. (Authorized by K.S.A. 1969 Supp. 65-187; effective Jan. 1, 1970; revoked March 23, 2001.)

28-10-89 to 28-10-99. Reserved.

C. Standards

28-10-100 through 28-10-108. (Authorized by K.S.A. 1969 Supp. 65-187; effective, E-68-23, Aug. 9, 1968; effective, E-69-6, Jan. 8, 1969; effective Jan. 1, 1970; revoked March 23, 2001.)

**Article 11.—APPROVAL OF
LABORATORIES PERFORMING
EXAMINATION OF MILK**

28-11-1 to 28-11-6. (Authorized by K.S.A. 65-737 (g); effective Jan. 1, 1966; revoked May 10, 1996.)

**Article 12.—PATHOGENIC
MICROORGANISMS**

28-12-1. Distribution and use of live pathogenic microorganisms. No pathogenic microorganisms and/or vectors shall be purchased or obtained either interstate or intrastate by persons for use at the highschool level (no exceptions). For this purpose the terms pathogenic microorganisms and vectors are defined as, “all cultures or collection or [of] microorganisms or their derivatives, which may introduce or disseminate any contagious or infectious disease of man or animals,” and “all animals (including poultry) such as mice, pigeons, guinea pigs, rats, ferrets, rabbits, chickens, dogs, and the like which have been inoculated with infectious organisms, or which are diseased or infected with any contagious, infectious, or communicable disease of humans, animals or poultry, or which have been exposed to any such diseases.” (Authorized by K.S.A. 65-101; effective Jan. 1, 1966.)

**Article 13.—UNDERGROUND STORAGE,
DISPOSAL WELLS AND SURFACE
PONDS**

28-13-1. Scope. This article regulates the construction and use of underground storage reservoirs and the construction and use of disposal wells and surface ponds for the confinement, storage and disposal of industrial fluids including but not limited to brines, but does not include regulations pertaining to oil field activities described in L. 1965, ch. 506, section 1 (4) (p). (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-13-2. Definitions. (A) Underground storage reservoir. An underground storage reservoir is hereby defined as any naturally occurring or artificially produced subsurface cavity in which petroleum products, acids, radioactive materials, or fluid or gaseous products are stored.

(B) Surface pond. The term surface pond as used herein is defined as any constructed, excavated or naturally occurring area used for the stor-

age, confinement or treatment of industrial waste waters, salt water or other highly mineralized waters.

(C) Disposal well. The term disposal well as used herein is defined as any well which receives industrial waste waters, both organic and inorganic, salt water or other highly mineralized waters for disposal into underground formations. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-13-3. Plans and specifications for underground reservoirs. Plans and specifications for the storage of petroleum products, acids, radioactive materials, or other fluid or gaseous products in underground reservoirs shall be submitted to the chief engineer for the board and approved prior to construction or development of the reservoir. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-4. Maintenance of certain records and reports of malfunctions required for underground reservoirs. Operators of underground reservoirs shall maintain a permanent record of the type and quantity of all products stored therein, and a continuous record of the injection pressures, and shall report immediately to the chief engineer for the board any failures or defects in the underground reservoir. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-5. Permits required for all surface ponds. The storage, confinement or disposal of industrial waste waters, salt water or other highly mineralized waters in surface ponds shall be prohibited unless a permit for such storage or disposal shall first be obtained from the state department of health. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-6. Applications for pond permits. Applications for permits for surface ponds shall be submitted in duplicate to the chief engineer for the board on forms obtainable from his office. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-7. Approval or denial of applications. Applications for permits to use surface ponds will be approved or denied within ten days from date of receipt of the application, information and supporting plans, specifications and other required documents, by the state department of health. Failure by the department to act upon an

application within ten days subsequent to such receipt shall serve as an automatic issuance of a permit. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-8. Authorized signatures. All permits and orders of revocation shall be signed by the chief engineer for the board. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-9. Removal of material from surface ponds upon abandonment or revocation of pond permit. Upon abandonment of a surface pond or the revocation of a pond permit, the operator shall dispose of the industrial waste water, salt water or other highly mineralized waters in a manner acceptable to the Kansas state department of health. (Authorized by K.S.A. 65-171d; effective Jan. 1, 1966.)

28-13-10 to 28-13-11. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966; revoked May 10, 1996.)

Article 14.—COLLECTION AND ANALYSIS OF WATER AND PUBLIC WATER SUPPLIES

28-14-1. Fees for analysis of samples from public water supply systems. All laboratory analyses conducted in the division of health and environmental laboratories of the Kansas department of health and environment shall require payment as specified in K.A.R. 28-14-2, except for analyses requested by departmental staff. The fee for any analysis not specified in K.A.R. 28-14-2 shall be based on the cost of the analysis as determined by the secretary. (Authorized by and implementing K.S.A. 65-156 and K.S.A. 2001 Supp. 65-166a; effective Jan. 1, 1966; amended, E-79-13, June 15, 1978; amended May 1, 1979; amended Nov. 1, 2002.)

28-14-2. Schedule of fees. All public water supply systems submitting samples for analysis to the division of health and environmental laboratories of the Kansas department of health and environment as specified in K.A.R. 28-15-14 shall receive a quarterly statement reflecting the cost of services rendered during the previous calendar quarter. Fees shall be paid to the Kansas department of health and environment within 30 days of receipt of statement. Failure to pay fees shall result in denial of future analytical services.

(a) Inorganic chemical analyses:

(1) Alkalinity	\$6.00
(2) Ammonia nitrogen	7.00
(3) Bromate	7.00
(4) Bromide	7.00
(5) Chlorate	7.00
(6) Chloride	7.00
(7) Chlorite	7.00
(8) Fluoride	7.00
(9) Mercury	15.00
(10) Metals	8.00
(11) Nitrate	7.00
(12) Nitrite	7.00
(13) Ortho-phosphate	7.00
(14) pH	6.00
(15) Silica	8.00
(16) Specific conductivity	6.00
(17) Sulfate	7.00
(18) Total dissolved solids (180° C)	15.00
(19) Total organic carbon (TOC)	10.00
(20) Total phosphate	10.00
(21) Total suspended solids	6.00
(22) Turbidity	5.00
(b) Organic chemical analyses:	
(1) Atrazine or Alachlor	\$100.00
(2) Organochlorine pesticides and polychlorinated biphenyls (PCB) screen, consisting of the following:	\$150.00
(A) Alachlor	
(B) Atrazine	
(C) Chlordane	
(D) Endrin	
(E) Heptachlor	
(F) Hepachlor Epoxide	
(G) Hexachlorobenzene	
(H) Hexachlorocyclopentadiene	
(I) Lindane (gamma-BHC)	
(J) Methoxychlor	
(K) PCB-1016	
(L) PCB-1221	
(M) PCB-1232	
(N) PCB-1242	
(O) PCB-1248	
(P) PCB-1254	
(Q) PCB-1260	
(R) Simazine	
(S) Toxaphene	
(3) Chlorinated acid pesticides consisting of the following:	125.00
(A) 2,4-D	
(B) 2,4,5-TP (Silvex)	
(C) Dinoseb	
(D) Pentachlorophenol	
(E) Picloram	

(4) Semi-volatile acid organic compounds consisting of the following:	250.00	(3) Gross beta	35.00
(A) Benzo(a)pyrene		(4) Radium-226	50.00
(B) Di(2-ethylhexyl) adipate		(5) Radium-228	50.00
(C) Di(2-ethylhexyl) phthalate		(6) Radon	35.00
(D) Hexachlorocyclopentadiene		(7) Tritium	60.00
(5) Carbamate pesticides consisting of the following:	150.00	(8) Uranium	70.00
(A) Aldicarb		(Authorized by and implementing K.S.A. 65-156 and K.S.A. 2001 Supp. 65-166a; effective Jan. 1, 1966; amended, E-79-13, June 15, 1978; amended May 1, 1979; amended May 1, 1982; amended, T-88-13, May 18, 1987; amended May 1, 1988; amended Jan. 4, 1993; amended Nov. 1, 2002.)	
(B) Aldicarb Sulfone		28-14-3 and 28-14-4. (Authorized by K.S.A. 1978 Supp. 65-156; effective Jan. 1, 1966; revoked, E-79-13, June 15, 1978; revoked May 1, 1979.)	
(C) Aldicarb Sulfoxide			
(D) Carbofuran			
(E) Oxamyl			
(6) Volatile organic compounds—dibromochloropropane (DBCP), ethylene dibromide (EDB), and the regulated volatiles listed below:	100.00		
(A) 1,1-Dichloroethylene			
(B) 1,1,1-Trichloroethane			
(C) 1,1,2-Trichloroethane			
(D) 1,2-Dichloroethane			
(E) cis-1,2-Dichloroethylene			
(F) trans-1,2-Dichloroethylene			
(G) 1,2-Dichloropropane			
(H) 1,2,4-Trichlorobenzene			
(I) Benzene			
(J) Carbon Tetrachloride (Tetrachloromethane)			
(K) o-Dichlorobenzene (1,2-Dichlorobenzene)			
(L) p-Dichlorobenzene (1,4-Dichlorobenzene)			
(M) Dichloromethane			
(N) Ethylbenzene			
(O) Monochlorobenzene			
(P) Styrene			
(Q) Tetrachloroethylene			
(R) Toluene			
(S) Trichloroethylene			
(T) Vinyl Chloride			
(U) Xylenes			
(7) Total trihalomethanes, consisting of the sum of the concentrations of trichloromethane (chloroform), bromodichloromethane, dibromochloromethane, and bromoform	40.00		
(8) Total haloacetic acids (HAA5), consisting of the sum of the concentrations of monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromacetic acid and dibromoacetic acid	125.00		
(c) Microbiological analyses:			
Coliform determination	8.00		
(d) Radiochemical analyses:			
(1) Gamma isotopic	60.00		
(2) Gross alpha	35.00		

Article 15.—APPLICATION FOR PERMITS; DOMESTIC WATER SUPPLY

28-15-1 to 28-15-10. (Authorized by K.S.A. 65-162, 65-163; effective Jan. 1, 1966; revoked May 1, 1982.)

28-15-11. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; amended Sept. 21, 1992; amended June 21, 1993; amended Sept. 26, 1994; amended Jan. 9, 1995; revoked Oct. 1, 2004.)

28-15-12. Public water supply fee fund.

On and after January 1, 1993, each public water supply shall pay a fee of \$0.002 per 1,000 gallons of water sold at retail and delivered through mains, lines or pipes.

(a) The fee shall be paid to the Kansas department of revenue on forms supplied by the director of taxation in the same manner as the water protection fee authorized by K.S.A. 82a-954 and amendments thereto.

(b) The public water supplier may collect the fee directly from each customer to which water is sold at retail or may pay the amount owed from moneys in its operating fund or other fund available for that purpose. (Authorized by and implementing K.S.A. 1991 Supp. 65-163, as amended by L. 1992, Ch. 188, sec. 1; effective, T-28-12-31-92, Dec. 31, 1992; effective Feb. 15, 1993.)

28-15-13. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; amended Sept. 21, 1992; amended June 21, 1993; amended Sept. 26, 1994; amended Jan. 9, 1995; revoked Oct. 1, 2004.)

28-15-14. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; amended Sept. 21, 1992; amended Jan. 9, 1995; revoked Oct. 1, 2004.)

28-15-15. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; revoked Sept. 21, 1992.)

28-15-15a. (Authorized by and implementing K.S.A. 65-171m; effective Sept. 21, 1992; amended Sept. 26, 1994; amended Jan. 9, 1995; revoked Oct. 1, 2004.)

28-15-16. Permit requirements for public water supply systems. (a) Each person who operates a public water supply system shall be required to have a permit issued by the secretary.

(b) Each application for a public water supply permit shall be submitted for review and consideration for approval and shall be required to be approved before the use of a source of water supply or the construction of any of the following:

- (1) New sources;
- (2) pumping facilities;
- (3) finished water storage facilities;
- (4) water treatment plants, facilities, or systems;
- (5) distribution systems and extensions to existing distribution systems; or
- (6) chemical storage, handling, and application facilities.

(c) Each application approved for construction purposes shall be valid for a period of two years, and if construction has not been commenced by that time, a new application shall be required.

(d) In addition to meeting the requirements specified in K.S.A. 65-163(a)(1) and amendments thereto, each person operating a public water supply system shall submit as part of the application the results of an analysis performed by a state-certified laboratory regarding the physical, bacteriological, chemical, and radiological constituents of the raw water to ensure that the proposed treatment facilities will produce potable water meeting the primary drinking water regulations established in article 15a. (Authorized by K.S.A. 65-171m; implementing K.S.A. 65-163; effective May 1, 1982; amended Jan. 9, 1995; amended Oct. 1, 2004.)

28-15-17. Siting requirements. A new or expanded facility shall not be initiated or constructed at a site which the department determines: (a) Is subject to a significant risk from earthquakes, floods, fires or other disasters which

could cause a breakdown of the public water supply system or a portion of it;

(b) Except for intake structures, is within the floodplain of a one-hundred (100) year flood; and is lower than the recorded high water level where appropriate records exist; or

(c) Is adjacent to a major source of pollution, which the department determines has a potentially adverse influence on the water supply. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982.)

28-15-18. Operation and maintenance requirements. (a) Each person who operates a public water supply system shall ensure that the system is operated, maintained, and supervised by certified personnel in accordance with K.S.A. 65-4501 through K.S.A. 65-4517 and amendments thereto.

(b) Each person who operates a public water supply system shall immediately notify the department and responsible local officials of any situation with the water system, including a major breakdown or serious loss of water service, that presents or could present an imminent and substantial endangerment to health.

(c) Each person who operates a community water supply system shall prepare an emergency operations plan to safeguard the water supply for the protection of the public if natural or man-made disasters occur. Emergency operation plans shall be submitted to the secretary for review and consideration for approval based on the secretary's assessment of whether the plan would safeguard the water supply.

(d) Newly constructed or repaired water distribution mains and finished water storage facilities shall be flushed and disinfected before use.

(e) Each community water supply system shall be operated and maintained to provide a minimum positive pressure of 20 psi (140 kN/m²) throughout the distribution system except under extraordinary conditions including unusual peak fire flow demand and major distribution system breaks.

(f) Each person who operates a community water supply system and each person who operates a high risk non-community system designated by the department shall have a regular program for the detection and elimination of cross-connections and prevention of backflow and backsiphonage.

(g) All finished water reservoirs shall be covered

by a permanent protective material and shall be vented and screened.

(h) Public water supply system components and protective coatings in contact with water intended for public consumption, and chemicals used in the treatment of water, shall be used to ensure the protection of public health and the environment.

(i) Each person who operates a public water supply system shall respond in writing no later than 45 days after receipt of a sanitary survey report describing how and on what schedule the system will address significant deficiencies identified in the survey. (Authorized by K.S.A. 65-171m; implementing K.S.A. 65-171h; effective May 1, 1982; amended Oct. 1, 2004.)

28-15-19. Disinfection of drinking water. (a) All drinking water supplied to the public from a public water supply system shall be disinfected.

(b) When chlorination is employed, a sufficient amount of chlorine shall be added to the water to maintain a distribution system chlorine residual of at least 0.2 mg/l of free chlorine or 1.0 mg/l of combined chlorine.

(1) Failure to maintain a residual as specified above in more than five percent of measurements taken each month, in any two consecutive months shall be deemed a violation of this regulation.

(2) Each day the public water supply system serves water to its customers, the operator shall make a determination of the chlorine residual. The data shall be recorded in such a manner that the department can determine whether the requirements of this rule and regulation have been met. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; amended Sept. 26, 1994.)

28-15-20. (Authorized by and implementing K.S.A. 65-171m; effective May 1, 1982; amended Sept. 21, 1992; amended Sept. 26, 1994; revoked Oct. 1, 2004.)

28-15-21. (Authorized by and implementing K.S.A. 65-171m; effective June 21, 1993; revoked Oct. 1, 2004.)

28-15-22. (Authorized by and implementing K.S.A. 65-171m; effective Sept. 26, 1994; revoked Oct. 1, 2004.)

28-15-23 to 28-15-24. Reserved.

28-15-25. (Authorized by K.S.A. 1977

Supp. 65-171m; effective, E-78-33, Dec. 7, 1977; effective May 1, 1978; revoked, L. 1982, ch. 471.)

28-15-26 to 28-15-34. Reserved.

ENVIRONMENTAL LABORATORY ACCREDITATION

28-15-35. Conditions of accreditation.

(a) Definitions. For the purposes of this article, the following definitions shall be used:

(1) "Accreditation" means the issuance of a document by the secretary attesting to the fact that a laboratory meets the minimum requirements specified in K.A.R. 28-15-35, 28-15-36, 28-15-36a, and 28-15-37. For the purposes of this article, the terms "accreditation" and "certification" are equivalent.

(A) "Primary accreditation" means the accreditation granted to a laboratory based on a review of the laboratory by the department for conformance with accreditation requirements.

(B) "Secondary accreditation" means the accreditation granted by reciprocity, which is based on primary accreditation granted by another state.

(2) "Accredited," when used to describe a laboratory, means that the laboratory meets all of the requirements for accreditation as specified in K.A.R. 28-15-35, 28-15-36, 28-15-36a, and 28-15-37.

(3) "Accrediting authority" means a territorial, state, federal, or international governmental agency that has responsibility and accountability for environmental laboratory accreditation and that grants accreditation.

(4) "Analyst" means a person who performs the analytical methods and associated techniques and who is responsible for applying required laboratory practices and other pertinent quality controls to meet the required level of quality.

(5) "Clean water act" and "CWA" mean U.S. public law 92-500, as amended by public law 92-217, public law 95-576, public law 96-483, and public law 97-117, and 33 U.S.C. 1251 et seq., as in effect on February 4, 1987, which governs water pollution control programs.

(6) "Denial" means the department's refusal to accredit a laboratory after submission of an application.

(7) "Department" means the Kansas department of health and environment.

(8) "EPA" means the U.S. environmental protection agency.

(9) (A) "Field of accreditation" means the following:

- (i) The matrix;
- (ii) the technology or method, or both; and
- (iii) the analyte or analyte group, or both.

(B) The matrices shall include the following:

- (i) Drinking water;
- (ii) nonpotable water, including all aqueous samples that are not public drinking water;
- (iii) solid and chemical materials, including soils, sediments, other solids, and nonaqueous liquids; and
- (iv) air and emissions, including ambient air and stack emissions.

(10) "Field of proficiency testing" means studies of proficiency testing by the following:

- (A) The matrix;
- (B) the technology; and
- (C) the analyte or analyte group, or both.

(11) "Field laboratory" means any Kansas environmental laboratory performing compliance analyses limited to one or more of the following fields of accreditation:

- (A) Chlorine;
- (B) dissolved oxygen;
- (C) hydrogen ion (pH);
- (D) sulfite;
- (E) temperature; or
- (F) turbidity.

(12) "Interim accreditation" means accreditation issued for either of the following:

(A) An additional field of accreditation utilizing a technology previously inspected by the laboratory accreditation officer and for which the laboratory meets all other accreditation requirements including acceptable proficiency testing studies, if available; or

(B) a field laboratory before inspection.

(13) "Laboratory" means a legally identifiable facility performing environmental analyses in a controlled and scientific manner.

(14) "Laboratory accreditation officer" means any person determined by the secretary to have adequate credentials to evaluate laboratories supplemented by successful completion of the EPA drinking water laboratory accreditation officers' training course, nationally approved assessor training courses, and refresher training courses.

(15) "Laboratory technical director" means a person whose functions are to direct technical personnel and evaluate the quality of test procedures performed in the laboratory.

(16) "Proficiency testing sample" and "PT"

mean a sample the composition of which is unknown to the analyst. The PT samples are used to test whether or not the laboratory can produce analytical results within specific performance limits.

(17) "Reciprocity" means the secretary's recognition of the validity of the accreditation granted by another accrediting authority, in order to issue Kansas accreditation based upon the evaluation conducted by that accrediting authority.

(18) "Resource conservation and recovery act" and "RCRA" mean 42 U.S.C. 6921, as amended by the solid waste disposal act of 1980, public law 94-482, as in effect on October 21, 1980, and as amended by the hazardous and solid waste act of 1984, public law 96-616, as in effect on November 8, 1984, which governs solid and hazardous waste programs.

(19) "Revocation" means the withdrawal of a laboratory's accreditation.

(20) "Safe drinking water act" and "SDWA" mean 42 U.S.C. §300f et seq., as in effect on August 8, 2005, formerly public law 104-182 et seq., which governs drinking water programs.

(21) "Secretary" means the secretary of the Kansas department of health and environment.

(22) "Supplemental accreditation" means accreditation based upon state-of-the-art technology for which the EPA has not given method approval and for which monitoring is required by the department.

(23) "Suspension" means the temporary removal of a laboratory's accreditation for a period of time that shall not exceed six months.

(24) "Technology" means a specific arrangement of analytical instruments, detection systems, or preparation techniques, or any combination of these.

(b) Application for accreditation. The requirements for applying for and maintaining accreditation shall be as follows:

(1) A complete application shall be submitted on forms provided by the department.

(2) Each laboratory, to maintain uninterrupted accreditation, shall file an application for renewal at least 60 calendar days before the current accreditation expires.

(3) Each applicant shall be subject to the payment of fees as specified in K.A.R. 28-15-37.

(4) When applications are submitted by accredited laboratories requesting accreditation for an additional field of accreditation, the expiration date for the additional accreditation shall be the

same date indicated on the certificate currently in effect for that laboratory. Additional fees shall be assessed for each additional method for each scope of accreditation as specified in K.A.R. 28-15-37.

(c) Scope of accreditation. Laboratories may be accredited for any of the following:

- (1) Drinking water (SDWA);
- (2) wastewater (CWA);
- (3) solid and hazardous waste (RCRA); or
- (4) field laboratory. Accreditation of field laboratories shall be limited to the fields of accreditation specified in paragraph (a)(11) of this regulation.

(d) On-site assessment.

(1) Each on-site assessment of a laboratory shall be conducted by a laboratory accreditation officer at least once every two years. Each on-site assessment shall be conducted to determine whether the laboratory meets the minimum requirements for accreditation as specified in K.A.R. 28-15-35 and 28-15-36.

(2) Each on-site assessment of a field laboratory shall be conducted by a laboratory accreditation officer at least once every three years. On-site assessments shall be conducted to determine whether the laboratory meets the minimum requirements for accreditation as specified in K.A.R. 28-15-35 and 28-15-36a.

(3) Additional on-site assessments may be performed to resolve problems indicated by deficiencies from proficiency testing, deficiencies from prior on-site assessments, or changes that an accredited laboratory makes in location, personnel, or methodology. Other on-site assessments may be conducted to resolve complaints.

(4) If deficiencies are identified during the on-site assessment, a deficiency report shall be submitted to the laboratory by the department. The laboratory shall respond to the deficiency report with corrective action within 30 days of receiving the deficiency report. If corrective action is considered not acceptable by the laboratory accreditation officer, the laboratory shall have an additional 30 days after notification of nonacceptance to submit a revised plan for corrective action. Failure to comply with this requirement shall result in denial, suspension or revocation of accreditation as established in paragraphs (g)(1), (g)(3), and (g)(5) of this regulation.

(e) Proficiency testing. For initial and continuing accreditation, each laboratory, excluding field laboratories, shall participate in proficiency test-

ing studies obtained from a nationally accredited proficiency test provider. Each laboratory shall demonstrate the successful performance of each test method for each proficiency testing field of accreditation for which the laboratory seeks or maintains accreditation. Laboratories shall be permitted to report multiple results for the same field of proficiency testing from one PT sample by using more than one method and type of technology.

(1) For initial accreditation, the laboratory shall meet the following requirements:

(A) Successfully complete two proficiency testing studies out of the three most recent rounds attempted; and

(B) schedule proficiency testing studies at least 15 days after the closing date of the previous study analyzed by the laboratory. The most recent three rounds attempted shall have occurred within 18 months of the date the laboratory submitted an application for accreditation. A result shall be considered unacceptable if the laboratory reports values for a field of proficiency testing outside of the acceptance limits.

(2) (A) For continuing accreditation, the laboratory shall meet the following requirements:

(i) Participate in a proficiency testing study twice per year. The completion dates of successive PT studies shall be approximately six months apart; and

(ii) maintain a performance history of at least two acceptable proficiency testing studies out of the three most recent studies. A result shall be considered unacceptable when either the laboratory reports values outside of the acceptance limits or the laboratory fails to participate in a study.

(B) Failure to maintain the acceptable performance history as specified in paragraph (e)(2)(A)(ii) shall result in suspension of the method related to the affected field of accreditation.

(C) A laboratory may elect to analyze a remedial proficiency testing sample after obtaining unacceptable results. The remedial sample shall be scheduled at least 15 days after the closing date of the previous study analyzed by the laboratory. The remedial sample shall be considered part of the laboratory's corrective action. The result shall count as part of the historical two-out-of-three performance criteria. If the result from the remedial sample is unacceptable, the laboratory shall be subject to suspension of the affected field of accreditation.

(3) After loss of accreditation of a field of accreditation due to nonacceptable performance,

the laboratory shall complete two acceptable proficiency testing studies out of the three most recent studies attempted for the failed field of accreditation before accreditation may be reinstated. Each study shall be scheduled at least 15 days after the closing date of the previous study analyzed by the laboratory.

(4) Proficiency test providers shall report the laboratory results for proficiency test samples in the format listed in "proficiency testing electronic data formats," published April 2003 by the department and hereby adopted by reference.

(5) During participation in a proficiency testing study and before the release of the results of the study, all of the following requirements shall be met:

(A) The laboratory's management and all analysts shall ensure that all PT samples are handled, managed, analyzed, and reported utilizing the staff, methods, procedures, equipment, quality controls, facilities, and frequency of analysis that are used for routine analysis of real environmental samples.

(B) The laboratory shall not send proficiency testing samples to another laboratory for any analysis for which the laboratory seeks accreditation.

(C) The laboratory shall not knowingly accept proficiency testing samples from another laboratory for any analysis for which the sender is seeking accreditation.

(D) The laboratory personnel shall not exchange or offer information about proficiency testing sample results with personnel from another laboratory.

(E) The laboratory personnel shall not attempt to obtain the true values of any proficiency testing samples from the provider.

(f) Notification of accreditation. A certificate shall be issued by the secretary to each laboratory satisfactorily meeting all requirements of K.A.R. 28-15-35, 28-15-36, 28-15-36a, and 28-15-37. The fields of accreditation for which the laboratory is accredited shall be noted. An accreditation number shall be assigned to each accredited laboratory and shall be included on the certificate. The certificate shall be issued for a 12-month period.

(g) Denial, suspension, or revocation of accreditation.

(1) Denial of accreditation. Laboratory accreditation shall be denied in part or in total for any of the following reasons:

- (A) Failure to submit a complete application;
- (B) failure to meet the requirements specified

in this regulation and in K.A.R. 28-15-36 and K.A.R. 28-15-36a;

(C) failure to successfully analyze and report proficiency testing samples as required in subsection (e) of this regulation;

(D) failure to demonstrate to the laboratory accreditation officer that the laboratory meets the required standards for accreditation, based upon an on-site assessment;

(E) failure to respond to the deficiency report with acceptable corrective action after an on-site assessment within the time period established in paragraph (d)(4) of this regulation;

(F) failure to implement corrective action;

(G) misrepresentation or omission of material facts;

(H) denial of entry during normal business hours for an on-site assessment;

(I) failure to pay the required fees as established in K.A.R. 28-15-37;

(J) failure to ensure that essential laboratory personnel are available for participation, as needed, for the satisfactory completion of an on-site assessment;

(K) any prior sustained charges of administrative violations of state or federal laws and regulations related to the provision of environmental laboratory services or reimbursement for these services, against the owner or owners or laboratory technical director or directors, individually or jointly, or against any laboratory owned or directed by these individuals; or

(L) conviction for a crime that is related to environmental laboratory services and involves theft or fraud.

(2) Accreditation after denial.

(A) Accreditation shall not be granted until a laboratory has demonstrated to the laboratory accreditation officer that the deficiencies that caused the denial have been corrected.

(B) If the laboratory is not successful in correcting the deficiencies that caused the denial, the laboratory shall wait six months before submitting a new application.

(C) After denial of accreditation in part, the laboratory shall reapply for accreditation of the affected fields of accreditation. After denial of accreditation in total, the laboratory shall submit a complete application to the department.

(3) Suspension of accreditation. Any accredited laboratory's accreditation may be suspended in part or in total for any of the following reasons:

(A) Failure to notify the laboratory accredita-

tion officer in writing within 30 days of changes in ownership, laboratory personnel, laboratory location, or methods that involve a change in technology or instrumentation;

(B) failure to successfully analyze and report proficiency testing samples as required in subsection (e);

(C) failure to respond to the deficiency report with acceptable corrective action after an on-site assessment;

(D) failure to respond to the deficiency report after an on-site assessment within the time period established in paragraph (d)(4);

(E) failure to implement corrective action after an on-site assessment; or

(F) failure to maintain compliance with this regulation and with K.A.R. 28-15-36, 28-15-36a, and 28-15-37.

(4) Accreditation after suspension.

(A) Accreditation after suspension shall not be granted until a laboratory has demonstrated to the laboratory accreditation officer that the deficiencies that caused suspension have been corrected.

(B) After suspension of accreditation in part, the laboratory shall reapply for accreditation of the affected fields of accreditation. After suspension of accreditation in total, the laboratory shall submit a complete application to the department.

(C) If the laboratory does not correct the deficiencies that caused the suspension within six months, the laboratory accreditation shall be revoked in part or in total.

(5) Revocation of accreditation.

(A) An accreditation may be revoked in part or in total if it is determined that there has been any of the following:

(i) Failure to maintain compliance with K.A.R. 28-15-35, 28-15-36, 28-15-36a, and 28-15-37;

(ii) reporting, as official compliance data, any field of accreditation or analytical result for which accreditation has not been obtained;

(iii) failure to respond to the deficiency report with acceptable corrective action after an on-site assessment;

(iv) failure to respond to the deficiency report after an on-site assessment within the time period established in paragraph (d)(4); or

(v) failure to implement corrective action after an on-site assessment.

(B) An accreditation may be revoked in total if it is determined that there has been any of the following:

(i) Misrepresentation or omission of material facts;

(ii) failure to participate in proficiency testing studies as required in subsection (e);

(iii) denying entry to a laboratory accreditation officer during the laboratory's working hours;

(iv) failure to ensure that essential laboratory personnel are available for participation, as needed, for the satisfactory completion of an on-site assessment;

(v) any prior sustained charges of administrative violations of state or federal laws and regulations related to the provision of environmental laboratory services or reimbursement for such services, against the owner or owners or laboratory technical director or directors, individually or jointly, or against any laboratory owned or directed by these individuals; or

(vi) conviction for a crime that is related to environmental laboratory services and involves theft or fraud.

(6) Accreditation after revocation.

(A) After revocation, accreditation shall not be granted until a laboratory has corrected the reason for revocation and has met all the requirements of the revocation order.

(B) After revocation of accreditation in part, the laboratory shall reapply for accreditation of the affected fields of accreditation. After revocation of accreditation in total, the laboratory shall submit a complete application to the department.

(h) Analytical results obtained after an accreditation has been suspended or revoked shall not be submitted to the department as official compliance data.

(i) Reciprocity.

(1) Establishment of reciprocity for the accreditation of laboratories located outside of the state of Kansas. Laboratories located outside of the state of Kansas that perform laboratory services as specified in K.S.A. 65-163 through K.S.A. 65-171t and amendments thereto, this regulation, and K.A.R. 28-16-28b, K.A.R. 28-16-63, and K.A.R. 28-31-4 may be accredited by the department, if the laboratory is accredited by a national environmental laboratory accrediting authority that the secretary recognizes as having standards equivalent to those standards established in this regulation and K.A.R. 28-15-36.

(2) Each out-of-state laboratory shall submit an application to the department with a copy of the current certificate issued by the primary accred-

iting authority or authorities, and the accreditation fees specified in K.A.R. 28-15-37.

(3) Laboratories located outside of Kansas shall not be approved as field laboratories.

(4) The laboratory shall be accredited only for the requested fields of accreditation for which it holds accreditation from its primary accrediting authority or authorities. The laboratory shall be accredited by the department for only fields of accreditation included in the Kansas scope of accreditation.

(5) In lieu of reciprocity, any out-of-state laboratory may apply for primary accreditation from the department if all of the following criteria are met:

(A) The on-site assessment of the laboratory is conducted by a third-party assessor contracted by the department.

(B) All fees and expenses for the on-site assessment of the laboratory are paid by the laboratory directly to the third-party assessor.

(C) The laboratory meets all other requirements for accreditation as specified in this regulation and in K.A.R. 28-15-36 and 28-15-37.

(j) Laboratory withdrawal of accreditation. Any laboratory may withdraw its application for accreditation at any time during the accreditation process. Any laboratory may withdraw from accreditation at any time during the accreditation period. In both cases, each laboratory shall notify the department in writing. The fees submitted to the department up to the time of the notification shall not be refunded, as specified in K.A.R. 28-15-37.

(k) The change in legal status, ownership, or location of an accredited laboratory.

(1) Each accredited laboratory shall notify the department, in writing, of any change in legal status, ownership or location, or any combination of these, within 30 calendar days of the change.

(2) Accreditation shall be transferred if the change in legal status or ownership of the accredited laboratory does not affect the laboratory's staff, equipment, and organization.

(3) Accreditation shall not be transferred if the change in legal status or ownership of the accredited laboratory affects the laboratory's staff, equipment, and organization. The laboratory shall be required to apply for accreditation as specified in subsection (b).

(4) Any change in the legal status, ownership, or location, or any combination of these, may re-

quire an on-site assessment of the laboratory by a laboratory accreditation officer.

(5) If a change in ownership occurs, all records and analyses that have been performed and that pertain to accreditation shall be retained for a minimum of five years and shall be subject to inspection by the department during this period without prior notification to the laboratory. (Authorized by K.S.A. 65-1,109a; implementing K.S.A. 65-1711 and 65-1,109a; effective, E-79-14, June 23, 1978; effective May 1, 1979; amended May 1, 1983; amended May 1, 1986; amended May 1, 1988; amended Jan. 24, 1994; amended May 25, 2001; amended March 26, 2004; amended June 1, 2007.)

28-15-36. Requirements for accreditation of environmental laboratories other than field laboratories. (a) For the purposes of this regulation, the definitions in the "environmental laboratory accreditation glossary," published August 2006 by the department and hereby adopted by reference, shall apply.

(b) The requirements for the approval of environmental laboratories shall be those requirements listed in sections 2.1.3, 2.2.3, 4.1.1, 4.1.8, 5.4, and 5.5 and appendices C, D.1, D.2, D.3, and D.4 of chapter 5 of "2003 NELAC standard," EPA/600/R-04/003, approved at the ninth NELAC annual meeting on June 5, 2003. The sections and appendices specified in this subsection are hereby adopted by reference.

(c) Each environmental laboratory shall meet all of the following requirements for the use of NELAC accreditation:

(1) Not misrepresent its fields of accreditation, methods, or analytes or its accreditation status on any document. These documents shall include laboratory reports, catalogs, advertising, business solicitations, proposals, quotations, and other materials;

(2) post or display its most recent accreditation certificate or its fields of accreditation in a prominent place in the laboratory facility;

(3) make accurate statements concerning its fields of accreditation and accreditation status;

(4) include at least the phrase "NELAP accredited" and the laboratory's accreditation number or other identifier if the accrediting authority's name is used on general literature, including catalogs, advertising, business solicitations, proposals, quotations, laboratory analytical reports, and any other materials; and

(5) not use its certificate, its accreditation status, the NELAC or NELAP logo, or both logos to imply endorsement by the department. (Authorized by K.S.A. 65-1,109a; implementing K.S.A. 65-1711 and 65-1,109a; effective, E-79-14, June 23, 1978; effective May 1, 1979; amended May 1, 1983; amended May 1, 1986; amended May 1, 1988; amended Jan. 24, 1994; amended May 25, 2001; amended March 26, 2004; amended June 1, 2007.)

28-15-36a. Requirements for accreditation of field laboratories. (a) Accreditation of a field laboratory shall be granted only to those laboratories performing environmental analyses limited to one or more of the following fields of accreditation:

- (1) Chlorine;
- (2) dissolved oxygen;
- (3) hydrogen ion (pH);
- (4) sulfite;
- (5) temperature; or
- (6) turbidity.

(b) Personnel. Each staff member performing analytical procedures shall meet the following minimum qualifications:

- (1) A high school diploma or equivalent;
- (2) knowledge of the use of analytical equipment and support equipment used for the analysis of the fields of accreditation listed in subsection (a); and
- (3) one month's experience in performing the analyses being considered for approval.

(c) Supplies, reagents, standards, and equipment.

(1) All items necessary for the performance of the analyses shall be available.

(2) Reagents and standards shall not exceed their expiration date.

(3) Equipment shall be properly maintained and in working order.

(4) Automated on-line equipment shall be maintained and calibrated according to manufacturer's instructions. The calibration and maintenance of automated equipment shall be documented.

(d) Analytical methods. Drinking water samples shall be analyzed in accordance with methods approved by the laboratory accreditation officer as required by the safe drinking water act. Environmental water samples analyzed under the clean water act shall be analyzed in accordance with methods approved by the laboratory accreditation

officer as required by the clean water act. Environmental samples analyzed under the resource conservation and recovery act shall be analyzed in accordance with methods approved by the laboratory accreditation officer as required by the resource conservation and recovery act.

(e) Sample collection and handling. All samples collected for field laboratory analysis shall be analyzed immediately after collection or on-site. The temperature of each sample shall be read and recorded at the sample site.

(f) Quality assurance.

(1) Each field laboratory shall implement and maintain a detailed, written standard operating procedure for collection, analysis, reporting, and data handling.

(2) Each instrument shall be calibrated on each day of use.

(3) Each calibration shall be verified with a quality control standard.

(4) Each aliquot of a solution used for calibration and quality control shall be used only once.

(g) Data handling.

(1) All records relating to data reported for regulatory compliance purposes shall be retained by the laboratory for at least five years. This requirement shall include the following if applicable:

(A) Calibration or standardization information, or both;

(B) quality controls, including standards and duplicates;

(C) calculations;

(D) sampling and analytical information; and

(E) reports.

(2) The sampling and analytical data to be retained shall include the following:

(A) The date, time, and location of sampling and analysis;

(B) the name of the person collecting the sample;

(C) the name of the analyst; and

(D) the type of analysis, method utilized, and results.

(h) The person in charge of each accredited field laboratory shall notify the accreditation officer, in writing, within 30 days of any changes in analytical equipment, personnel, facility location, facility name, or facility ownership. If any changes in personnel take place, the person in charge of the accredited field laboratory shall be responsible for the placement and training of individuals meeting the qualifications requirements specified in subsection (b). (Authorized by K.S.A. 65-

1,109a; implementing K.S.A. 65-1711 and 65-1,109a; effective Jan. 24, 1994; amended May 25, 2001; amended June 1, 2007.)

28-15-37. Fees. (a) (1) The accreditation fees for primary accreditation for laboratories located in the state of Kansas shall be as follows:

- (A) (i) \$1,000.00 for aquatic toxicity;
- (ii) \$300.00 for microbiology field of accreditation for one scope of accreditation and \$500.00 for more than one scope of accreditation;
- (iii) \$500.00 for metal field of accreditation for each scope of accreditation;
- (iv) \$1,000.00 for organic chemistry field of accreditation for each scope of accreditation;
- (v) \$500.00 for inorganic chemistry field of accreditation for each scope of accreditation; and
- (vi) \$1,000.00 for radiochemistry field of accreditation for each scope of accreditation;
- (B) \$200.00 for each supplemental accreditation; and
- (C) \$200.00 for each laboratory operating more than one facility in different physical locations and accredited under the same certificate, in addition to any of the accreditation fees.

(2) The accreditation fee for primary accreditation for each laboratory located out of the state of Kansas shall be \$1,750.00 for each scope of accreditation. The laboratory shall be responsible for all fees and expenses for the assessment of the laboratory that are paid by the laboratory directly to a third-party assessor contracted by the department.

(3) The accreditation fee for each laboratory accredited by reciprocity shall be \$1,250.00 for each scope of accreditation.

(4) The accreditation fees for each field laboratory shall be \$200.00 for one field of accreditation and \$350.00 for more than one field of accreditation.

(b) The person in charge of each laboratory shall submit the applicable fees specified in subsection (a) with the application forms provided by the department.

(c) For each scope of accreditation, each laboratory shall be assessed a \$75.00 fee for each field of accreditation added within that scope of accreditation during the accreditation period.

(d) All fees shall be remitted in full before the issuance of the certificate. Fees shall not be refunded except in the case of overpayment. Payment of fees shall be made to the Kansas division of health and environmental laboratories. (Au-

thorized by and implementing K.S.A. 65-1,109a; effective, E-79-14, June 23, 1978; effective May 1, 1979; amended May 1, 1986; amended Jan. 24, 1994; amended May 25, 2001; amended June 1, 2007.)

28-15-50. Definitions. For the purposes of these regulations, the following words and phrases are defined as follows:

(a) "Capacity" means the technical, managerial, and financial ability to comply with applicable national primary drinking water standards.

(b) "Conservation plans and practices" means conservation plans and practices approved by either the Kansas water office or the division of water resources, Kansas department of agriculture, as consistent with guidelines developed and maintained by the Kansas water office pursuant to K.S.A. 74-2608 and amendments.

(c) "Debt service coverage ratio" means the sum of net income plus interest expense plus depreciation, divided by the sum of principal and interest payments for debt service.

(d) "Department" means the Kansas department of health and environment.

(e) "Disadvantaged community" means a loan applicant or the service area of a loan applicant that meets affordability criteria established by the secretary.

(f) "Equivalency" means that portion of the Kansas water supply loan fund that is equal to the amount of capitalization grants provided by the federal government.

(g) "Equivalency project" means a project that is funded from the equivalency portion of the Kansas water supply loan fund.

(h) "Fund" means the Kansas water supply fund established by K.S.A. 1996 Supp. 65-163e et seq., and amendments, and may consist of more than one pool of money.

(i) "Intended use plan" means the plan prepared according to K.S.A. 1996 Supp. 65-163h and amendments.

(j) "Loan agreement" means an executed contract between a loan applicant and the secretary confirming the purpose of the loan, the amount and terms of the loan, the schedule of the loan payments and requirements, and any other agreed upon conditions set forth by the secretary.

(k) "Loan applicant" means one of the following:

(1) any political or taxing subdivision authorized by law to construct, operate, and maintain a

public water supply system, including water districts;

(2) two or more such subdivisions jointly constructing, operating, or maintaining a public water supply system; or

(3) the Kansas rural water finance authority.

(l) "National primary drinking water standards" means a regulation that specifies either a maximum contaminant level or a treatment technique along with associated monitoring and reporting requirements for contaminants with adverse health effects on persons.

(m) "Project completion" means the initiation of operation or the ability to initiate operation.

(n) "Project" means acquisition, construction, reconstruction, improving, equipping, rehabilitation, or extension of all or any part of a public water supply system.

(o) "Public water supply system" has the meaning provided by K.S.A. 65-162a and amendments.

(p) "Secretary" means the secretary of health and environment.

(q) "Significant noncompliance" means failure to comply with any national primary drinking water standard according to criteria established by the administrator of the federal environmental protection agency.

(r) "Water transfer" has the meaning provided by K.S.A. 1996 Supp. 82a-1501 and amendments. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-51. Fund use eligibility. (a) The fund shall be used only to provide loans to loan applicants for all or any part of the following:

(1) The acquisition, construction, reconstruction, improvement, equipping, rehabilitation, or extension of all or any part of a public water supply system;

(2) costs for project planning, design, and construction inspection, if included in the loan application; and

(3) if a construction contract has been awarded on or after August 6, 1996, refinancing the acquisition, construction, improvement, equipping, rehabilitation, or extension of all or any part of a public water supply system, including costs for project planning, design, and construction inspection. Refinancing shall be allowed only from funds provided directly or indirectly, by federal appropriations for federal fiscal year 1997.

(b) Each project eligible to receive loans shall appear on the project priority list prepared by the department. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-52. Interest rate. (a) Each loan shall bear interest for the entire life of the loan at a fixed rate set by the secretary. This fixed rate shall be calculated as described in subsection (b). Fees for servicing the loans may also be set by the secretary.

(b) The interest rate shall be calculated as a percentage, as set forth in the intended use plan, of three months' average of the "bond buyers 20 bond index." The average is determined using rates published on Monday of each week of the immediately preceding three months. The loan interest rate as calculated shall include any loan service fees.

(c) The interest rate and loan servicing fee shall be the same for all loan applicants. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-53. Repayment of loans. (a) All principal and interest shall be repaid in accordance with the terms and conditions of the executed loan agreement. Repayments shall begin no later than two years after receipt of the first loan disbursement, and in no case later than one year following completion of the project. Repayment of the loan shall not exceed a 20-year repayment period as agreed upon in the loan agreement.

(b) Prepayment of the principal in whole or part may be made, in accordance with the terms and conditions of the executed loan agreement. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-54. Dedicated loan repayment source. (a) Each loan recipient shall adopt one or more dedicated sources for repayment of the loan, including principal and interest. The dedicated sources of revenue may be in the form of revenue from water sales, service charges, connection fees, special assessments, property taxes, grants, or some combination of these sources. Each dedi-

cated source of revenue shall be legally available to the loan recipient over the life of the loan and pledged to the repayment of the loan. Each dedicated source of revenue shall be approved by the secretary.

(1) Each loan recipient with general taxing authority shall commit to using that authority, if necessary, as a condition of receiving a loan. As an alternative to pledging general tax authority, any such loan recipient may purchase bond insurance.

(2) Each loan recipient without general taxing authority shall purchase bond insurance as a condition of receiving a loan. As an alternative to purchasing bond insurance, any such loan recipient shall pledge to maintain either of the following:

(A) A debt service coverage ratio of 140%; or

(B) a debt service coverage ratio of 125% combined with a 10% loan reserve account.

(b) Each loan recipient shall conduct an annual revenue source review during the entire life of the loan repayment obligation and, if necessary, shall implement new revenue rates as approved by the secretary. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-55. Failure to repay loan on schedule. (a) Upon failure of a loan recipient to pay one or more installments of the loan repayment on schedule, the governing body of the loan recipient shall be consulted by the secretary and may be required to undergo a financial and management operations review.

(b) The governing body shall correct any deficiencies noted during the review and adopt charges as set by the secretary, to be levied against users of the project. These charges shall remain in effect until the full amount of the loan, including principal and interest, has been repaid, unless otherwise approved by the secretary. The governing body of each loan recipient shall collect any such charges and shall forward all receipts from such charges on a schedule established by the secretary. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-56. Project eligibility. (a) No assistance from the fund shall be provided for any water transfer project, or for any portion of a project

involving a water transfer. No assistance from the fund shall be provided to any loan applicant who has not adopted and implemented water conservation plans and practices.

(b) No assistance shall be provided to any loan applicant in significant noncompliance with any applicable primary drinking water regulation, unless the project will return the loan applicant to compliance.

(c) No assistance shall be provided to any loan applicant lacking capacity, unless the loan applicant agrees to undertake feasible and appropriate changes in operations, including ownership, management, accounting, rates, maintenance, consolidation, alternative sources of supply, or other procedures if the secretary determines that such changes are required to demonstrate capacity.

(d) No assistance shall be provided for projects and activities deemed ineligible for participation by the U.S. environmental protection agency. Any such projects and activities shall be listed in the intended use plan. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-57. Equivalency projects. Equivalency projects shall be required to comply with federal laws and executive orders that apply to all activities receiving federal assistance. In any given year, more projects than are necessary to equal the equivalency portion of the fund may be required to comply with equivalency project requirements, for the purpose of building an equivalency credit for future federal funds. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-58. User charge system. Each loan applicant shall develop and, after the secretary's review and approval, adopt a rate system that shall produce adequate revenue for repayment of the loan principal and interest, and for operation and maintenance of the entire public water supply system, including depreciation. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-59. Project certification. Each

loan recipient shall certify to the secretary whether or not the project meets its design requirements on the date one year after the initiation of operation of the project. The loan recipient shall be responsible for assuring timely correction and compliance, including recertification if the initial certification concluded that the project did not meet its design requirements. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-60. Procurement. Each loan recipient shall follow state procurement laws and regulations applicable to the recipient and procedures established by the secretary. The secretary's approval is required before awarding any contract for construction. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-61. Project documents. (a) Each loan applicant shall submit the following documents for the secretary's review and approval:

(1) A completed loan application on application forms furnished by the department;

(2) an engineering report describing the need for the project, project design parameters, and an estimate of cost; and

(3) financial statements for the previous three years.

(b) Each loan recipient shall submit the following documents for the secretary's review and approval:

(1) Complete design plans, specifications, and construction bidding documents, including detailed cost estimates for competitive bidding, and projected construction and payment schedules;

(2) a plan for providing construction inspection services;

(3) a plan of operation, including an overall project completion schedule, annual operating cost projections for a minimum of five years, a description of the financial management system, and projected revenues to operate and maintain the public water supply system. Revenue projections shall also include the loan repayment obligations; and

(4) an operations manual, which shall be submitted before 90% of the project is completed. (Authorized by K.S.A. 1996 Supp. 65-163f; imple-

menting K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-62. Financial capability. As part of the loan application, the loan applicant shall demonstrate and certify to the secretary that the applicant has the financial capability to repay the loan and to cover the costs of operation and maintenance of the entire public water supply system of which the proposed project is an integral part. This financial assessment shall cover the life of the loan obligation and consider, at a minimum, changes in economic and population growth, depreciation, existing debt obligations, revenues, project costs, and effects on user charge rates. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-63. Public participation. (a) Each loan applicant shall conduct a minimum of one public hearing before execution of the loan agreement, to discuss the proposed project and receive input on alternatives. Notice of the public hearing shall be provided to the department and shall be published in one or more newspapers, as needed to cover the project service area, at least 30 calendar days before the public hearing.

(b) A record of the public hearing and proof of publication shall be submitted prior to execution of the loan agreement.

(c) The 30-day public notice requirement may be waived by the secretary for any project deemed an emergency. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-64. Environmental review. (a) The "Environmental review procedure for Kansas public water supply loan fund," dated July 1997, is adopted by reference as the required environmental review procedure for an equivalency project.

(b) For an equivalency project, 40 CFR 6.508(a), 6.511(b), and 6.512, as in effect on July 1, 1996, are hereby adopted by reference.

(c) Those members of the public who participated in the environmental review process shall have the right to appeal the decisions made within that process. All such appeals shall be conducted

pursuant to the Kansas administrative procedure act and the act for judicial review set forth in K.S.A. 77-501 et seq. and 77-601 et seq., respectively.

(d) When used in any provision adopted from 40 CFR Part 6, references to "EPA" shall be replaced with the "Kansas department of health and environment"; "grant" shall be replaced with "loan agreement"; "grantee" shall be replaced with "applicant." (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 65-163e through 65-163u; effective Oct. 10, 1997.)

28-15-65. Project accounts. Each loan recipient shall maintain project accounts in accordance with generally accepted government accounting standards as defined in the 1994 edition of the "governmental accounting, auditing, and financial reporting" manual issued by the government finance officers association. (Authorized by K.S.A. 1996 Supp. 65-163f; implementing K.S.A. 1996 Supp. 65-163d, as amended by 1997 S.B. 40, sec. 1, and K.S.A. 1996 Supp. 65-163e through 65-163u; effective Oct. 10, 1997.)

Article 15a.—PRIMARY DRINKING WATER

28-15a-2. Definitions; replaced terms.

(a) For the purposes of articles 15 and 15a, the definitions contained in 40 CFR 141.2, as in effect on July 1, 2003, are hereby adopted by reference with the following alterations:

(1)(A) The definition of "Public water system" shall be replaced with the following: "Public water supply system" means a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if the system has at least 10 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. This term shall include the following:

"(1) Any collection, treatment, storage, and distribution facilities under control of the operator of the system and used primarily in connection with the system; and

"(2) any collection or pretreatment storage facilities not under this control that are used primarily in connection with the system.

"This term shall not include any 'special irrigation district.'

"Each public water supply system shall be deemed either a 'community water supply system' or a 'non-community water supply system.'"

(B) The term "public water supply system" shall replace the term "public water system" wherever the latter term appears in any of the text adopted in this article.

(2) The definition of "Community water system" shall be replaced with the following: "Community water supply system" means a public water supply system which has at least 10 service connections used by year-round residents or regularly serves at least 25 year-round residents."

The term "community water supply system" shall replace the term "community water system" wherever the latter term appears in any of the text adopted in this article.

(3) The definition of "Person" shall be replaced by the following: "'Person' means an individual, corporation, company, institution, association, partnership, township, municipality, county, state, or federal agency that owns, administers, operates, or maintains a public water supply system."

(4) The following definitions shall be added to 40 CFR 141.2:

(A) "Administrator" means administrator of the environmental protection agency.

(B) "Approved laboratory" means a laboratory certified and approved by the department to analyze water samples to determine compliance with maximum contaminant levels or to perform other required analyses.

(C) "Department" and "primacy agency" mean the Kansas department of health and environment.

(D) "Distribution system" means the system of conduits and appurtenances by which a water supply is distributed to customers.

(E) "Laboratory tests" means all bacteriological, chemical, physical, or radiological tests made by either the departmental laboratory or an approved laboratory on water samples that were submitted by the operator of a public water supply system to confirm the quality of water.

(F) "Operating records and reports" means the daily record and the monthly report of data connected with the operation of the public water supply system's facilities.

(G) "Secretary" and "state" mean the secretary of the Kansas department of health and environment.

(H) "Significant deficiency" means any defect in a public water supply system's design, opera-

tion, maintenance, or administration, as well as any failure or malfunction of any system component that causes, or has the potential to cause, an unacceptable risk to health or that could affect the reliable delivery of safe drinking water.

(I) “Turbidity” means the cloudy condition of water caused by the presence of finely suspended matter, including clay, silt, plankton, and microscopic organisms, resulting in the scattering and absorption of light rays. Turbidity is measured in nephelometric turbidity units (NTU).

(b) For the purposes of this article, the following terms and phrases appearing in the federal regulations adopted by reference in these regulations shall be defined or replaced as specified in this subsection:

(1) “SDWA” means the safe drinking water act, 42 U.S.C.S. § 300f et seq., formerly Pub. L. 104-182 et seq., and amendments thereto.

(2) “This part” and “part” shall be replaced by “this article” and “article.”

(3) “This subpart” and “subpart” mean that specific, named group of primary drinking water regulations in which the regulation is placed within this article.

(4) “Must” shall be replaced by “shall.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-3. Coverage; conditions for exclusion. The provisions of 40 CFR 141.3, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-4. Variances and exemptions for small systems. Variances or exemptions from certain provisions of these regulations may be granted by the secretary pursuant to 40 CFR Part 142, subpart K, sections 301 through 307, as in effect on July 1, 2003, and hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-6. Effective dates. (a) The provisions of 40 CFR 141.6(j), as in effect on July 1, 2003, are hereby adopted by reference.

(b) The following text shall be added: “All internal requirements regarding effective dates which have passed, completion dates which have passed, or beginning compliance dates which have passed within a C.F.R. that is adopted by reference shall be replaced with the date these regulations become effective.” (Authorized by and im-

plementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-11. Maximum contaminant levels for inorganic chemicals. The provisions of 40 CFR 141.11(d), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-21. Coliform sampling. Each person who operates a public water supply system shall comply with the monitoring and analytical requirements for coliforms contained in 40 CFR 141.21, as in effect on July 1, 2003 and hereby adopted by reference except for 141.21(a)(2) and (a)(3), which are replaced with the following text:

“(a)(2) The sampling period for microbiological compliance shall be one calendar month for all public water supply systems.

“(a)(3) Number of required samples.

“(i) Each public water supply system that uses surface water as its source of supply and serves a population of 4,100 or less shall take a minimum of four water samples each sampling period.

“(ii) Each public water supply system that uses surface water as its source of supply and serves a population greater than 4,100 shall take water samples according to the schedule prescribed in subsection (a)(3)(iv).

“(iii) Each public water supply system that uses groundwater as its source of supply and each public water supply system that purchases water from another public water supply system shall take water samples according to the schedule specified in paragraph (a)(3)(iv).

“(iv) Each public water supply system shall assure that routine samples are collected at regular time intervals and analyzed for total coliform bacteria as specified in the following table.

Population Served	Minimum number of samples per sampling period
25 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20

Population Served	Minimum number of samples per sampling period
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180

For each additional 150,000 in population, an additional 30 water samples shall be analyzed per sampling period.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-23. Inorganic chemical sampling and analytical requirements. Each person who operates a public water supply system shall comply with the sampling and analytical requirements specified in 40 CFR 141.23, as in effect on July 1, 2003 and hereby adopted by reference, with the addition of the following text, which shall be added at the beginning of 40 CFR 141.23(c):

“Inorganic analysis for calcium, chloride, iron, magnesium, manganese, pH, potassium, silica, sodium, specific conductance, sulfate, total alkalinity, total dissolved solids, total hardness, and total phosphorus shall be required from each community water supply system with its own source of supply and from each non-transient, non-community water supply system with its own source of supply. Each person operating a groundwater system shall take one sample at each sampling point during each compliance period. Each person operating a surface water system (or combined surface water and groundwater system) shall take one sample annually at each sampling point.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-24. Requirements for sampling and analyzing organic chemicals. The provisions of 40 CFR 141.24, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-25. Analytical methods for measuring radioactivity. The provisions of 40

CFR 141.25, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-26. Frequency of monitoring for radioactivity. The provisions of 40 CFR 141.26, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-27. Alternate analytical techniques. The provisions of 40 CFR 141.27, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-28. Approved laboratories. The provisions of 40 CFR 141.28, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-29. Monitoring of consecutive public water supply systems. The provisions of 40 CFR 141.29, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-31. General reporting requirements. The provisions of 40 CFR 141.31, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-33. General record maintenance. The provisions of 40 CFR 141.33, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-41. Special monitoring for sodium. The provisions of 40 CFR 141.41, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-42. Special monitoring for corrosivity characteristics. The provisions of 40 CFR 141.42, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-43. Prohibition on use of lead pipes, solder, and flux. The provisions of 40

CFR 141.43(a) and (d), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-60. Effective dates for maximum contaminant levels and maximum residual disinfectant levels. The provisions of 40 CFR 141.60, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-61. Maximum contaminant levels for organic contaminants. The provisions of 40 CFR 141.61, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-62. Maximum contaminant levels for inorganic contaminants. The provisions of 40 CFR 141.62, as in effect on July 1, 2003, are hereby adopted by reference with the addition of the following text:

“(e) The maximum contaminant level for arsenic shall apply only to community water supply systems. The analyses and determination of compliance with the 0.05 milligrams per liter maximum contaminant level for arsenic shall conform to the requirements of K.A.R. 28-15a-23.

“(f) The maximum contaminant level for arsenic shall be 0.05 milligrams per liter for community water supply systems until January 23, 2006.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-63. Maximum contaminant levels for microbiological contaminants. The provisions of 40 CFR 141.63, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-64. Maximum contaminant levels for disinfection byproducts. The provisions of 40 CFR 141.64, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-65. Maximum residual disinfectant levels. The provisions of 40 CFR 141.65, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-66. Maximum contaminant levels for radionuclides. The provisions of 40 CFR 141.66, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-70. General requirements for filtration and disinfection. The provisions of 40 CFR 141.70(a) through (c), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-72. Disinfection. Each person who operates a public water supply system using a surface water source or groundwater under the direct influence of a surface water source shall comply with the disinfection requirements specified in 40 CFR 141.72, as in effect on July 1, 2003 and hereby adopted by reference, with the following alterations:

(a) 40 CFR 141.72(a) shall be deleted.

(b) 40 CFR 141.72(b)(3)(i) shall be replaced with the following text:

“When chlorination is employed, a sufficient amount of chlorine shall be added to the water to maintain a distribution system chlorine residual of at least 0.2 mg/L of free chlorine or 1.0 mg/L of combined chlorine.

“Failure to maintain a residual as specified in paragraph (b)(1) in more than five percent of measurements taken each month, in any two consecutive months, shall be deemed a violation of this regulation.

“Each day the public water supply system serves water to customers, the operator shall make a measurement of the chlorine residual. The data shall be recorded in a manner that enables the secretary to determine whether or not the requirements of this regulation have been met.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-73. Filtration. Each person who operates a public water supply system that uses a surface water source or groundwater under the direct influence of a surface water source shall comply with the filtration requirements specified in 40 CFR 141.73, as in effect on July 1, 2003 and hereby adopted by reference, with the following modifications:

(a) 40 CFR 141.73(a)(4) shall be replaced with the following: “Beginning January 1, 2005, public water supply systems serving fewer than 10,000

people shall meet the turbidity requirements in 40 CFR 141.550 through 40 CFR 141.553.”

(b) 40 CFR 141.73(d) shall be replaced with the following: “Other filtration technologies. A public water supply system may use a filtration technology not listed in subsections (a) through (c) of this regulation if it demonstrates to the state, using pilot plant studies or other means, that the alternative filtration technology, in combination with disinfection treatment that meets the requirements of 40 CFR 141.72(b), consistently achieves either 99.9 percent removal or inactivation, or both, of *Giardia lamblia* cysts and either 99.99 percent removal or inactivation of viruses, or both. For a system that makes this demonstration, the requirements of subsection (b) of this regulation shall apply. Beginning January 1, 2002, systems serving at least 10,000 people shall meet the requirements for other filtration technologies in 40 CFR 141.173(b). Beginning January 1, 2005, systems serving fewer than 10,000 people shall meet the requirements for other filtration technologies in 40 CFR 141.550 through 40 CFR 141.553.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-74. Filtration and disinfection: analytical and monitoring requirements. The provisions of 40 CFR 141.74, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-75. Filtration and disinfection: reporting and recordkeeping requirements. The provisions of 40 CFR 141.75, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-76. Filter recycling requirements. The provisions of 40 CFR 141.76, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-80. General requirements for control of lead and copper. The provisions of 40 CFR 141.80, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-81. Applicability of corrosion control treatment steps. The provisions of 40

CFR 141.81, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-82. Requirements for corrosion control treatment. The provisions of 40 CFR 141.82(a) through (h), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-83. Requirements for source water treatment. The provisions of 40 CFR 141.83(a) through (b)(6), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-84. Requirements for lead service line replacement. The provisions of 40 CFR 141.84, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-85. Requirements for public education and supplemental monitoring. The provisions of 40 CFR 141.85, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-86. Monitoring requirements for lead and copper in tap water. The provisions of 40 CFR 141.86, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-87. Monitoring requirements for water quality parameters. The provisions of 40 CFR 141.87, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-88. Monitoring requirements for lead and copper in source water. The provisions of 40 CFR 141.88, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-89. Analytical methods for control of lead and copper. The provisions of 40 CFR 141.89, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and

implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-90. Reporting requirements for lead and copper control. The provisions of 40 CFR 141.90, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-91. Recordkeeping requirements for lead and copper control. The provisions of 40 CFR 141.91, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-100. Requirements for public water supply systems using point-of-entry devices. The provisions of 40 CFR 141.100, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-101. Use of bottled water. Each person operating a public water supply system shall ensure that the system uses bottled water only in accordance with 40 CFR 141.101, as in effect on July 1, 2003 and hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-110. General requirements for treatment techniques. The provisions of 40 CFR 141.110, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-111. Treatment techniques for acrylamide and epichlorohydrin. The provisions of 40 CFR 141.111, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-130. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: general requirements. The provisions of 40 CFR 141.130, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-131. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: analytical requirements.

The provisions of 40 CFR 141.131, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-132. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: monitoring requirements. The provisions of 40 CFR 141.132, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-133. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: compliance requirements. The provisions of 40 CFR 141.133, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-134. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors: reporting and record-keeping requirements. The provisions of 40 CFR 141.134, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-135. Treatment technique for control of disinfection byproduct precursors. The provisions of 40 CFR 141.135, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-151. Applicability of requirement for consumer confidence reports. The provisions of 40 CFR 141.151 and appendix A to subpart O of part 141, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-152. Effective dates for required consumer confidence reports. The provisions of 40 CFR 141.152, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-153. Content of consumer confidence reports. The provisions of 40 CFR 141.153, as in effect on July 1, 2003, are hereby adopted by reference. However, the text in 40

CFR 141.153(d)(1)(i) shall be replaced by the following: "Contaminants subject to an MCL, action level, maximum residual disinfectant level, treatment technique for regulated contaminants, and those contaminants listed in K.A.R. 28-15a-23 which are not subject to an MCL but are still required to be monitored." (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-154. Required additional health information. The provisions of 40 CFR 141.154, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-155. Report delivery and recordkeeping. The provisions of 40 CFR 141.155, as in effect on July 1, 2003, are hereby adopted by reference, with the following alterations:

(a) The text in 40 CFR 141.155(c) shall be replaced by the following: "No later than the date a community water supply system is required to distribute the report to its customers, that system shall mail a copy of the report to the department, including a certification of delivery that the report has been distributed to customers and that the information is correct and consistent with the compliance monitoring data contained in the report."

(b) The text in 40 CFR 141.155(g) shall be deleted. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-170. General requirements for enhanced filtration and disinfection for subpart H systems serving 10,000 or more people. The provisions of 40 CFR 141.170, as in effect on July 1, 2003, are hereby adopted by reference with the following alterations:

(a) 40 CFR 141.170(c) shall be deleted.

(b) 40 CFR 141.170(d) shall be replaced with the following: "The persons operating Subpart H public water supply systems that did not conduct optional monitoring under 40 CFR 141.172 because the public water supply systems served fewer than 10,000 persons when such monitoring was required, but serve more than 10,000 persons before January 1, 2005 shall comply with 40 CFR 141.170, 141.171, 141.173, 141.174, and 141.175. The persons operating these public water supply systems shall also consult with the state to establish a disinfection benchmark. Each person that operates a public water supply system who de-

cides to make a significant change to the disinfection practice, as described in 40 CFR 141.172(c)(1)(i) through (iv), shall consult with the state before making the change." (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-172. Disinfection profiling and benchmarking for subpart H systems serving 10,000 or more people. The provisions of 40 CFR 141.172, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-173. Enhanced filtration requirements for subpart H systems serving 10,000 or more people. The provisions of 40 CFR 141.173, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-174. Enhanced filtration sampling requirements for subpart H systems serving 10,000 or more people. In addition to the monitoring requirements of K.A.R. 28-15a-74, each person who operates a public water supply system that is supplied by surface water or groundwater under the direct influence of surface water, serves at least 10,000 people, and provides conventional or direct filtration treatment shall comply with the filtration sampling requirements contained in 40 CFR 141.174, as in effect on July 1, 2003 and hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-175. Enhanced filtration and disinfection reporting and recordkeeping requirements for subpart H systems serving 10,000 or more people. In addition to complying with the reporting and recordkeeping requirements of K.A.R. 28-15a-75, each person who operates a public water supply system that is supplied by surface water or groundwater under the direct influence of surface water, serves at least 10,000 people, and provides conventional or direct filtration treatment shall comply with the reporting and recordkeeping requirements contained in 40 CFR 141.175, as in effect on July 1, 2003 and hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-201. General requirements for

public notification. Each person who operates a public water supply system shall comply with 40 CFR 141.201 and appendices A, B, and C to subpart Q of part 141, as in effect on July 1, 2003 and hereby adopted by reference, with the exception that endnote 8 to appendix B shall be replaced with the following text:

“There are various regulations that set turbidity standards for different types of public water supply systems, including 40 CFR 141.13, the 1989 surface water treatment rule (SWTR), the 1998 interim enhanced surface water treatment rule (IESWTR) and the 2001 long term 1 enhanced surface water treatment rule (LT1ESWTR). For public water supply systems subject to the IESWTR (systems serving at least 10,000 people, using surface water or groundwater under the influence of surface water) that use conventional or direct filtration, after January 1, 2002, the turbidity level of a public water supply system’s combined filter effluent shall not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a public water supply system’s combined filter effluent shall not exceed 1 NTU at any time. Public water supply systems subject to the IESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration shall meet turbidity limits set by the primacy agency. For public water supply systems subject to the LT1ESWTR (public water supply systems serving fewer than 10,000 people, using surface water or groundwater under the influence of surface water) that use conventional or direct filtration, after January 1, 2005 the turbidity level of a public water supply system’s combined filter effluent shall not exceed 0.3 NTU in at least 95 percent of monthly measurements, and the turbidity level of a public water supply system’s combined filter effluent shall not exceed 1 NTU at any time. Public water supply systems subject to the LT1ESWTR using technologies other than conventional, direct, slow sand, or diatomaceous earth filtration shall meet turbidity limits set by the primacy agency.” (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-202. Tier 1 public notice: form, manner, and frequency of notice. The provisions of 40 CFR 141.202, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-203. Tier 2 public notice: form,

manner, and frequency of notice. The provisions of 40 CFR 141.203, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-204. Tier 3 public notice: form, manner, and frequency of notice. The provisions of 40 CFR 141.204, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-205. Content of public notice. The provisions of 40 CFR 141.205, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-206. Notice to new billing units or new customers. The provisions of 40 CFR 141.206, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-207. Special notice of availability of results of unregulated contaminant monitoring. Each person operating a public water supply system that is required to monitor for unregulated contaminants under 40 CFR 141.40 shall comply with the provisions of 40 CFR 141.207, as in effect on July 1, 2003 and hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-208. Special notice for exceedance of the secondary maximum contaminant level (SMCL) for fluoride. The provisions of 40 CFR 141.208, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-209. Special notice for nitrate exceedances above MCL by non-community water supply systems (NCWSS). The provisions of 40 CFR 141.209, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-210. Notice by department on behalf of the public water supply system. The provisions of 40 CFR 141.210, as in effect on July 1, 2003, are hereby adopted by reference. (Au-

thorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-500. General requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.500, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-501. Applicability of general requirements for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.501, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-502. Effective dates of requirements for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people. The requirements for enhanced filtration and disinfection for public water supply systems serving fewer than 10,000 people shall be effective on and after January 1, 2005 except where otherwise noted. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-503. Compliance criteria for enhanced filtration and disinfection in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.503(c) through (g), as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-530. Disinfection profiling for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.530, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-531. Criteria for avoiding disinfection profiling in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.531, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-532. Effective dates for required disinfection profiling in subpart H systems serving fewer than 10,000 people. The

provisions of 40 CFR 141.532, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-533. Collection of disinfection profile data for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.533, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-534. Calculation of inactivation ratio for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.534, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-535. Inactivation ratio for viruses in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.535, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-536. Retention of disinfection profile data for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.536, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-540. Disinfection benchmark for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.540, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-541. Significant changes to disinfection practice in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.541, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-542. Consultation regarding significant change to disinfection practice for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.542, as in effect on July 1, 2003, are hereby adopted by ref-

erence. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-543. Calculation of disinfection benchmark for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.543, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-544. Disinfection benchmark for primary disinfectants other than chlorine for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.544, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-550. Requirements for combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.550, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-551. Limits for strengthened combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.551, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-552. Alternative filtration demonstration for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.552, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-553. Special provision for combined filter effluent in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.553, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-560. Requirements for individual filter turbidity in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.560, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by

and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-561. Contingency requirements for monitoring of individual filter turbidity in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.561, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-562. Special provision for continuous monitoring of combined filter effluent turbidity in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.562, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-563. Follow-up actions to monitoring of individual filter turbidity for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.563, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-564. Special provision for alternative turbidity exceedance levels in subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.564, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-570. Reporting requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.570, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

28-15a-571. Recordkeeping requirements for enhanced filtration and disinfection for subpart H systems serving fewer than 10,000 people. The provisions of 40 CFR 141.571, as in effect on July 1, 2003, are hereby adopted by reference. (Authorized by and implementing K.S.A. 65-171m; effective Oct. 1, 2004.)

Article 16.—WATER POLLUTION CONTROL

SEWAGE DISCHARGE PERMITS

28-16-1. Information required. (A) Application on form furnished by the department.

- (B) Plans.
- (C) Specifications.
- (D) Engineer's report. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-2. Submission of information.

Plans, specifications, report and application must be submitted to the chief engineer for the board at least three weeks prior to the date on which action is desired. It is not to be inferred, however, that action will always be taken within the time mentioned. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-3. Plans. Plans for sewerage systems, sewer extensions and sewage treatment plants shall include:

(A) A general map of the municipality or sewer district, showing all proposed and existing streets and alleys, drawn to a scale not smaller than 300 feet to one inch, with all sewer lines, with sizes indicated, and the location of all manholes, cleanouts, and other appurtenances.

(B) The profiles of all sewers, with sizes of sewers, elevations of the sewer inverts of all manholes, and the grade of the sewers between each two adjacent manholes plainly stated. At the sewer outlet shall be shown the approximate elevation of the bottom of the stream, or ordinary low water, and of annual and extraordinary high water. Elevation of extraordinary high water shall be shown on profiles of sewers subject to flooding. Scales of profiles must be clearly stated. The following scale is suggested: vertical, 10 feet to 1 inch; horizontal, 100 feet to 1 inch.

(C) Detail drawings of manholes, cleanouts, inlets, catch basins, overflows, outlets, and all other appurtenances must accompany the application. Unless sewers are other than vitrified clay, detail drawing must be submitted.

(D) The plans for the treatment plant shall include: (1) a general layout, showing areas for future extension, embankments, various parts of plant, course of outfall sewer, outlet, stream with direction of flow, and any branches in immediate neighborhood, etc.; (2) details of longitudinal and transverse sections sufficient to make clear the construction of each unit. Details of each feature, inlet and outlet devices, baffles, valves, overflows, arrangement of automatic devices, etc., the depth and sizes of filtering media, the method of distribution and collection of sewage on the beds, and such other information as is necessary for a complete understanding of the plans.

Each drawing shall have a legible title showing the name of the town or person for whom the drawing is made, name of engineer, scale, date, and substance of drawing. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-4. Specifications. Specifications for the construction of the work shall accompany all plans for new or original systems. Where plans are for extensions to systems, the specifications may be omitted, provided it is stated that work is to be constructed under specifications already on file. It is desired that the estimate of cost be included, but this is not compulsory. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-5. Engineer's report. A comprehensive report of the proposed work, written or approved by the consulting or designing engineer, must accompany all plans for a complete system or treatment plant, and must give all data upon which the design is based, such as information concerning sewer systems:

(A) The nature and extent of the area included with the present system of sewerage, and of the area which it is planned shall drain into this system ultimately.

(B) Population to be served, present and future, estimated for twenty-five years.

(C) The estimated daily per capita flow of sewage, and the total and per capita water consumption of the town at the present time.

(D) The allowance made for infiltration.

(E) The estimated daily flow of sewage.

(F) The character of the sewage. If domestic and trade wastes, estimate nature, and approximate quantity of each.

(G) Method of flushing or cleaning sewers.

(H) Portion to be built at present time.

(I) Minimum and maximum grade of sewers of each size.

(J) If there are sections which cannot grade into this system, the extent of such sections and the probable future disposition of sewage from these sections.

(K) Distance of houses or buildings from proposed outlet or treatment plant.

(L) Approximate maximum and minimum flow of water in stream receiving flow of sewage.

(M) Drainage area above outlet or treatment plant.

(N) Nearest water supplies taken from stream below plant or outlet; above plant or outlet. Dams

in vicinity of plant or outlet. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-6. Information concerning treatment plant. In addition to that concerning sewer systems: Engineer's report should cover the following points: method of treatment and description of units; rate of loading; nature of body of water; disposal of sludge; special devices; special methods of maintenance or operation; results expected from treatment plant. Explain any reserve units in pipelines, filters, tanks, etc. Describe pumping unit if sewage is pumped, and any automatic arrangements. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-7. Deviation from plans. There shall be no deviation from plans submitted to and approved by the department, unless amended plans showing proposed changes have been submitted to and approved by the department. Copies of approved plans, specifications, application and report must be filed with the department and permit obtained before the contract for the work is let. (Authorized by K.S.A. 65-164, 65-165, 65-171d; effective Jan. 1, 1966.)

28-16-8 to 28-16-10. (Authorized by K.S.A. 65-170, 65-171d; effective Jan. 1, 1966; revoked Jan. 1, 1972.)

RIVER BASIN WATER QUALITY CRITERIA

28-16-11 to 28-16-26. (Authorized by K.S.A. 1971 Supp. 65-165 through 65-171d; effective, E-67-6, May 31, 1967; effective Jan. 1, 1968; amended, E-71-12, Feb. 1, 1971; amended Jan. 1, 1972; revoked, E-73-16, May 18, 1973; revoked Jan. 1, 1974.)

28-16-27. Emergency or accidental discharge of sewage or other detrimental material into waters; report to department of health. The owner or person responsible for the discharge of sewage or other materials detrimental to the quality of waters of the state, under conditions other than provided for by a valid permit issued by the secretary of the state board of health, shall report such discharge to the state department of health, environmental health services.

When sewage treatment facilities or portions thereof are programmed for bypassing for cause, which results in reduced treatment efficiency below acceptable levels, the owner or his representative shall notify and receive approval from the

state department of health at least seven (7) days prior to such discharge.

Emergency or accidental discharge of sewage or other materials detrimental to the quality of waters of the state shall be immediately reported to the state department of health by the owner of the treatment plant or his representative. In the event the water pollution-causing material is in transit or in storage within the state, it shall be the responsibility of the owner, the carrier, or person responsible for storage, to immediately notify the state department of health that the pollutant has gained admittance or there is the potential the pollutant will gain admittance to waters of the state. (Authorized by K.S.A. 65-164, 65-169, 65-171a, 65-171f, K.S.A. 1968 Supp. 65-165, 65-166, 65-167, 65-171d, 65-171h; effective Jan. 1, 1969.)

28-16-28. (Authorized by K.S.A. 1977 Supp. 65-165 through 65-171d; effective, E-73-16, May 18, 1973; effective Jan. 1, 1974; amended, E-76-3, Jan. 1, 1975; amended May 1, 1975; amended May 1, 1978; revoked May 1, 1986.)

28-16-28a. (Authorized by K.S.A. 1977 Supp. 65-165, 65-166, 65-166a, 65-167, 65-169, 65-170, 65-171a through 65-171d; effective, E-76-15, Feb. 28, 1975; effective May 1, 1976; amended May 1, 1978; revoked May 1, 1986.)

SURFACE WATER QUALITY STANDARDS

28-16-28b. Definitions. As used in these regulations, the following terms shall have these meanings: (a) "Alluvial aquifer" means the sediment that is associated with and deposited by a stream, and that contains water capable of being produced from a well.

(b) "Alternate low flow" means a low flow value, which is an alternate to the 7Q10 flow, that is based seasonally, hydrologically, or biologically, or a low flow determined through a water assurance district. Wherever used in this regulation in the context of mixing zones, the term shall refer to a minimum amount of streamflow occurring immediately upstream of a wastewater discharge and available, in whole or in part, for dilution and assimilation of wastewater discharges.

(c) "Antidegradation" means the regulatory actions and measures taken to prevent or minimize the lowering of water quality in surface waters of the state, including those streams, lakes, and wetlands in which existing water quality exceeds the

level required for maintenance and protection of the existing uses.

(d) "Artificial sources" means sources of pollution that result from human activities and that can be abated by construction of control structures, modification of operating practices, complete restraint of activities, or any combination of these methods.

(e) "Background concentration" means the concentration of any elemental parameter listed in tables 1a, 1b, 1c, 1d, and 1e of the "Kansas surface water quality standards: tables of numeric criteria," which is adopted by reference in K.A.R. 28-16-28e(d), or any elemental substance meeting the definition of pollutant in subsection (tt), that occurs in a surface water immediately upstream of a point source or nonpoint source under consideration and is from natural sources. The list of background concentration determinations for classified waterbodies of the state is contained in table 1h of the "Kansas surface water quality standards: tables of numeric criteria," as adopted by reference in K.A.R. 28-16-28e(d).

(f) "Base flow" means that portion of a stream's flow contributed by sources of water other than precipitation runoff. Wherever used in this regulation in the context of stream classification, the term shall refer to a fair weather flow sustained primarily by springs or groundwater seepage, wastewater discharges, irrigation return flows, releases from reservoirs, or any combination of these factors.

(g) "Bioaccumulation" means the accumulation of toxic substances in plant or animal tissue through either bioconcentration or biomagnification.

(h) "Bioassessment methods and procedures" means the use of biological methods of assessing surface water quality, including field investigations of aquatic organisms and laboratory or field aquatic toxicity tests.

(i) "Bioconcentration" means the concentration and incorporation of toxic substances into body tissues from ambient sources.

(j) "Biomagnification" means the transport of toxic substances through the food chain through successive cycles of eating and being eaten, and through the subsequent accumulation and concentration of these substances in higher-order consumers and predators.

(k) "Biota" means the animal and plant life and other organisms of a given geographical region.

(l) "Carcinogenic" means having the property

of inducing the production of cancerous cells in organisms.

(m) "Classified surface water" means any surface water or surface water segment that supports or, in the absence of artificial sources of pollution, would support one or more of the designated uses of surface water defined in K.A.R. 28-16-28d(b) or K.S.A. 82a-2001(c), and amendments thereto, and that meets the criteria for classification given in K.A.R. 28-16-28d(a).

(n) "Compliance schedule" means any provision in a discharge permit, license, or enforceable order issued by the department pursuant to the federal clean water act or K.S.A. 65-165 et seq., and amendments thereto, that, for the purposes of meeting water quality-based effluent limitations, technology-based limits, effluent limitations determined by the secretary's best professional judgement, or other requirements in the Kansas statutes and regulations, provides a specified period of time for the construction or renovation of a wastewater treatment facility and the completion of any related scientific or engineering studies, reports, plans, design specifications, or other submittals required by the department.

(o) "Condition of acute toxicity" means any concentration of a toxic substance that exceeds the applicable acute criterion for aquatic life support presented in K.A.R. 28-16-28e or, for substances not listed in K.A.R. 28-16-28e or for mixtures of toxic substances, any concentration that exceeds 0.3 acute toxic units (TU_a), where one TU_a is equal to 100 divided by the median lethal concentration (LC_{50}). The concentration at which acute toxicity exists shall be determined through laboratory toxicity tests conducted in accordance with the United States environmental protection agency's "methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms," fifth edition, as published in October 2002, which is hereby adopted by reference.

(p) "Condition of chronic toxicity" means any concentration of a toxic substance that exceeds the applicable chronic criterion for aquatic life support presented in K.A.R. 28-16-28e or, for substances not listed in K.A.R. 28-16-28e or for mixtures of toxic substances, any concentration that exceeds 1.0 chronic toxic unit (TU_c), where one TU_c is equal to 100 divided by inhibition concentration 25 (IC_{25}). The concentration at which chronic toxicity exists shall be determined through laboratory toxicity tests conducted in accordance with the United States environmental protection

agency's "short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms," fourth edition, as published in October 2002, which is hereby adopted by reference.

(q) "Criterion" means any numerical element or narrative provision of the surface water quality standards representing an enforceable water quality condition.

(r) "Critical low flow" means the minimum amount of streamflow immediately upstream of a point source discharge that will be used to calculate the quantity of pollutants the point source discharge may be permitted to discharge without exceeding water quality criteria set out by these regulations. The critical low flow may be the 7Q10 flow or the alternate low flow as defined in subsection (b) of this regulation.

(s) "Department" means the Kansas department of health and environment.

(t) "Designated use" means any of the uses specifically attributed to surface waters of the state in K.A.R. 28-16-28d(b) or K.S.A. 82a-2001(c), and amendments thereto.

(u) "Discharge" means the release of effluent, either directly or indirectly, into surface waters of the state.

(v) "Ecological integrity" means the natural or unimpaired structure and functioning of an aquatic or terrestrial ecosystem.

(w) "Effluent" means the sewage or other wastewater discharged from an artificial source.

(x) "*Escherichia coli*" means a subset of the coliform group that is part of the normal intestinal flora in humans and animals and is a direct indicator of fecal contamination in water.

(y) "Exceptional state waters" means any of the surface waters or surface water segments that are of remarkable quality or of significant recreational or ecological value, are listed in the surface water register as defined in subsection (ddd), and are afforded the level of water quality protection under the antidegradation provisions of K.A.R. 28-16-28c(a) and the mixing zone provisions of K.A.R. 28-16-28c(b).

(z) "Existing use" means any of the designated uses described in K.A.R. 28-16-28d(b) or K.S.A. 82a-2001(c), and amendments thereto, known to have occurred in, or to have been made of, a surface water or surface water segment on or after November 28, 1975.

(aa) "Fecal coliform bacteria" means facultatively anaerobic, gram negative, non-spore form-

ing, rod-shaped bacteria that, when cultured under specific laboratory conditions, will ferment lactose, thereby producing acid, gas, or both.

(bb) "Federal clean water act" means the federal water pollution prevention and control act, 33 U.S.C. 1251 et seq., as amended on February 4, 1987.

(cc) "General purpose waters" means any classified surface water that is not classified as an outstanding national resource water or an exceptional state water.

(dd) "Groundwater" means water located under the surface of the land that is or can be the source of supply for wells, springs, or seeps, or that is held in aquifers or the soil profile.

(ee) "Inhibition concentration 25 (IC₂₅)" means a point estimate of the toxicant concentration that would cause a 25 percent reduction in a nonlethal biological measurement of the test organisms, including reproduction and growth.

(ff) "Kansas antidegradation policy," dated August 6, 2001 and hereby adopted by reference, means the written departmental policy used to prevent or minimize the lowering of water quality in surface waters of the state.

(gg) "Kansas implementation procedures: surface water quality standards," dated April 28, 2004, means the written departmental procedures used for carrying out specific provisions of surface water quality standards, available upon request from KDHE's division of environment, which is hereby adopted by reference.

(hh) "Maximum contaminant level" means any of the enforceable standards for finished drinking water quality promulgated by the United States environmental protection agency pursuant to 40 C.F.R. 141.11 through 141.16 and 40 C.F.R. 141.60 through 141.66, dated July 1, 2003, which is hereby adopted by reference.

(ii) "Median lethal concentration" means the concentration of a toxic substance or a mixture of toxic substances calculated to be lethal to 50 percent of the population of test organisms in an acute toxicity test.

(jj) "Microfibers per liter (μfibers/L)" means the number of microscopic particles with a length-to-width ratio of 3:1 or greater present in a volume of one liter.

(kk) "Microgram per liter (μg/L)" means the concentration of a substance at which one one-millionth of a gram (10⁻⁶ g) of the substance is present in a volume of one liter.

(ll) "Milligram per liter (mg/L)" means the

concentration of a substance at which one one-thousandth of a gram (10^{-3} g) of the substance is present in a volume of one liter.

(mm) "Mixing zone" means the designated portion of a stream or lake where a discharge is incompletely mixed with the receiving surface water and where, in accordance with K.A.R. 28-16-28e(d), concentrations of certain pollutants may legally exceed chronic water quality criteria associated with the established designated uses that are applied in most other portions of the receiving surface water.

(nn) "Mutagenic" means having the property of directly or indirectly causing a mutation.

(oo) "Nonpoint source" means any activity that is not required to have a national pollutant discharge elimination system permit and that results in the release of pollutants to waters of the state. This release may result from precipitation runoff, aerial drift and deposition from the air, or the release of subsurface brine or other contaminated groundwaters to surface waters of the state.

(pp) "Outstanding national resource water" means any of the surface waters or surface water segments of extraordinary recreational or ecological significance identified in the surface water register, as defined in subsection (ddd), and afforded the highest level of water quality protection under the antidegradation provisions of K.A.R. 28-16-28c(a) and the mixing zone provisions of K.A.R. 28-16-28c(b).

(qq) "pH" means the common logarithm of the reciprocal of the hydrogen ion concentration measured in moles per liter, expressed on a scale that ranges from zero to 14, with values less than seven being more acidic and values greater than seven being more alkaline.

(rr) "Picocurie per liter (pCi/L)" means a volumetric unit of radioactivity equal to 2.22 nuclear transformations per minute per liter.

(ss) "Point source" means any discernible, confined, and discrete conveyance including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or floating craft, from which pollutants are or could be discharged. This term may include structures or site conditions that act to collect and convey stormwater runoff from roadways, urban areas, or industrial sites. This term shall not include agricultural stormwater discharges or return flows from irrigated agricultural land.

(tt) "Pollutant" means any physical, biological,

or chemical conditions, substances, or combination of substances released into surface waters of the state that results in surface water pollution, as defined in subsection (uu).

(uu) "Pollution" means any of the following:

(1) Contamination or other alteration of the physical, chemical, or biological properties of the surface waters of the state, including changes in temperature, taste, odor, turbidity, or color of the waters;

(2) discharges of gaseous, liquid, solid, radioactive, microbiological, or other substances into surface waters in a manner that may create a nuisance or render these waters harmful, detrimental, or injurious to any of the following:

(A) Public health, safety, or welfare;

(B) domestic, industrial, agricultural, recreational, or other designated uses; or

(C) livestock, domestic animals, or native or naturalized plant or animal life; or

(3) any discharge that will or is likely to exceed state effluent limitations predicated upon technology-based effluent standards or water quality-based standards.

(vv) "Potable water" means water that is suitable for drinking and cooking purposes in terms of both human health and aesthetic considerations.

(ww) "Precipitation runoff" means the rainwater, or the meltwater derived from snow, hail, sleet, or other forms of atmospheric precipitation, that flows by gravity over the surface of the land and into streams, lakes, or wetlands.

(xx) "Presedimentation sludge" means a slurry or suspension of residual solid materials derived from an initial step in the production of potable water. Presedimentation sludge shall also include residual solids originating from the raw water supply used for industrial or other nonpotable water purposes, before the addition of any artificial materials not typically used in the production of potable water. The solid materials shall include sand, silt, and other easily settleable particles originating from the raw water supply.

(yy) "Private surface water" means any freshwater reservoir or pond that is both located on and completely bordered by land under common private ownership.

(zz) "Public swimming area" means either of the following:

(1) Any classified surface water that is posted for swimming by a federal, state, or local govern-

ment that has jurisdiction over the land adjacent to that particular body of water; or

(2) any privately owned or leased body of water that is open and accessible to the public and is intended for swimming.

(aaa) "Seven-day, ten-year low flow (7Q10 flow)" means the seven-day average low flow having a recurrence frequency of once in 10 years, as statistically determined from historical flow data. Where used in this regulation in the context of mixing zones, the term shall refer to the minimum amount of streamflow occurring immediately upstream of a wastewater discharge and available, in whole or in part, for dilution or assimilation of wastewater discharges.

(bbb) "Site-specific criterion" means any criterion applicable to a given classified surface water segment and developed for the protection of the designated uses of that segment alone.

(ccc) "Stream flow" means the volume of water moving past a stream cross-sectional plane per unit of time.

(ddd) "Surface water register" means a list of the state's major classified surface waters, including a listing of waters recognized as outstanding national resource waters or exceptional state waters, and the surface water use designations for each classified surface water, periodically updated and published by the department pursuant to the requirements of K.A.R. 28-16-28d(d)(2) and K.A.R. 28-16-28f(a). The surface water register, published as the "Kansas surface water register," is adopted by reference in K.A.R. 28-16-28g.

(eee) "Surface water segment" means a delineated portion of a stream, lake, or wetland.

(fff) "Surface waters" means all of the following:

(1) Streams, including rivers, creeks, brooks, sloughs, draws, arroyos, canals, springs, seeps, and cavern streams, and any alluvial aquifers associated with these surface waters;

(2) lakes, including oxbow lakes and other natural lakes and man-made reservoirs, lakes, and ponds; and

(3) wetlands, including water bodies meeting the technical definition for jurisdictional wetlands given in the "corps of engineers wetlands delineation manual," as published in January 1987.

(ggg) "Surface waters of the state" means all surface waters occurring within the borders of the state of Kansas or forming a part of the border between Kansas and one of the adjoining states.

(hhh) "Teratogenic" means having the prop-

erty of causing abnormalities that originate from impairment of an event that is typical in embryonic or fetal development.

(iii) "Toxic substance" means any substance that produces deleterious physiological effects in humans, animals, or plants.

(jjj) "Turbidity" means the cloudiness of water as measured by optical methods (nephelometry) and expressed in standard nephelometric units.

(kkk) "Use attainability analysis" means a study conducted or accepted by the department that is designed to determine whether or not a surface water or surface water segment supports, or is capable of supporting in the absence of artificial sources of pollution, one or more of the designated uses defined in K.A.R. 28-16-28d(b) or K.S.A. 82a-2001, and amendments thereto.

(lll) "Variance" means the department's written approval and authorization of a proposed action that knowingly will result in a lack of conformity with one or more of the criteria of K.A.R. 28-16-28e but that is deemed necessary based on the provisions of 40 C.F.R. 131.10(g)(1) through (g)(6), as in effect on July 1, 2003, which is hereby adopted by reference. Variances shall be administered by the department in accordance with K.A.R. 28-16-28f(e).

(mmm) "Water-effect ratio (WER)" means the numerical toxicity (median lethal concentration or inhibition concentration 25) of a chemical pollutant diluted in water from a given stream, lake, or wetland divided by the numerical toxicity of the same pollutant diluted in laboratory water.

(nnn) "Water quality certification" means the department's written finding that a proposed action that impacts upon water quality will comply with the terms and conditions of the surface water quality standards.

(ooo) "Whole-effluent toxicity limitation" means any restriction imposed by the department on the overall acute or chronic toxicity of an effluent discharged to a surface water.

(ppp) "Zone of initial dilution" means the region of a surface water in the immediate vicinity of a discharge where acute and chronic criteria may be exceeded. (Authorized by K.S.A. 2003 Supp. 65-171d and K.S.A. 65-171m; implementing K.S.A. 65-165, K.S.A. 2003 Supp. 65-171d, K.S.A. 65-171m, and K.S.A. 2003 Supp. 82a-2001; effective May 1, 1986; amended Aug. 29, 1994; amended July 30, 1999; amended Nov. 3, 2000; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Oct. 24, 2003; amended Jan. 28, 2005.)

28-16-28c. General provisions. (a) Antidegradation.

(1) General purpose waters.

(A) Levels of water quality in surface waters of the state shall be maintained to protect the existing uses of those surface waters.

(B) For all surface waters of the state, if existing water quality is better than applicable water quality criteria established in these regulations, that existing water quality shall be fully maintained and protected. Water quality may be lowered only if the department finds, after full satisfaction of the intergovernmental coordination and public participation requirements on antidegradation contained in the Kansas antidegradation policy, as defined in K.A.R. 28-16-28b (ff), that a lowering of water quality is needed to allow for important social or economic development in the geographical area in which the waters are located. In allowing the lowering of water quality, the maintenance and protection of existing uses shall be ensured by the department, and the highest statutory and regulatory requirements for all new and existing point sources of pollution and all cost-effective and reasonable best management practices for nonpoint sources of pollution shall be achieved.

(2) Wherever surface waters of the state constitute exceptional state waters, discharges shall be allowed only if existing uses and existing water quality are maintained and protected.

(3) Wherever surface waters of the state constitute an outstanding national resource water, existing uses and existing water quality shall be maintained and protected. New or expanded discharges shall not be allowed into outstanding national resource waters.

(4) No degradation of surface water quality by artificial sources of pollution shall be allowed if the degradation will result in harmful effects on populations of any threatened or endangered species of aquatic or semiaquatic life or terrestrial wildlife or its critical habitat as determined by the secretary of wildlife and parks pursuant to K.S.A. 32-960, and amendments thereto, and K.A.R. 115-15-3 or in the federal endangered species act, 16 U.S.C. 1532, as amended on October 7, 1988.

(5) Temporary sources of pollution complying with the provisions of subsection (d) of this regulation and K.A.R. 28-16-28e(b), producing only ephemeral surface water quality degradation not harmful to existing uses, may be allowed by the department.

(6) Implementation of these antidegradation provisions for thermal discharges shall be consistent with the requirements of 33 U.S.C. 1326, as in effect on January 1, 1989.

(7) Implementation of these antidegradation provisions shall be consistent with the guidelines provided in the Kansas antidegradation policy, available upon request from the department.

(b) Mixing zones.

(1) General limitations. Mixing zones shall not extend across public drinking water intakes, stream tributary mouths, or swimming or boat ramp areas, nor shall mixing zones exist in locations that preclude the normal upstream or downstream movement or migration of aquatic organisms. Mixing zones associated with separate discharges shall not overlap unless a department-approved demonstration indicates that the overlapping will not result in a violation of the general water quality criteria set forth in K.A.R. 28-16-28e(b) or in an impairment of the existing uses of the receiving surface water. The zone of initial dilution for a mixing zone shall comprise, in terms of volume, not more than 10 percent of the mixing zone.

(2) Discharges into classified streams. No mixing zone within a classified stream shall extend beyond the middle of the nearest downstream current crossover point, where the main current flows from one bank to the opposite bank, or more than 300 meters downstream from the point of effluent discharge.

(3) If the ratio of the receiving stream critical low flow to the discharge design flow is less than 3:1, then the mixing zone shall be the cross-sectional area or the volumetric flow of the stream during critical low flow conditions, as measured immediately upstream of the discharge during the critical low flow.

(4) Mixing zones shall be applied in accordance with paragraphs (b)(7) and (b)(8)(A), (B), (C), and (D) of this regulation, based on the classification and designated uses of a stream segment for individual pollutants. For surface waters classified as outstanding national resource waters or exceptional state waters, or designated as special aquatic life use waters, mixing zones for specific discharges may be allowed by the secretary in accordance with paragraphs (b)(6), (b)(7), and (b)(8)(A) of this regulation. Mixing zones also may be allowed if there are no aquatic life criteria for an individual pollutant.

(5) Wherever site conditions preclude the

rapid dispersion and dilution of effluent within the receiving surface water or if, in the judgment of the secretary, the presence of a mixing zone would unduly jeopardize human health or any of the existing uses of the receiving surface water, the right to prohibit the use of mixing zones or to place more stringent limitations on mixing zones than those stipulated in paragraphs (b)(2), (3), and (13) of this regulation shall be reserved by the department.

(6) Outstanding national resource waters. Mixing zones may be allowed by the secretary for existing permitted discharges in stream segments classified in the future as outstanding national resource waters but shall be evaluated on an individual permit basis to prevent the degradation of the stream segment.

(7) Exceptional state waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 25 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(8) General purpose waters.

(A) Special aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 25 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(B) Expected aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 50 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(C) Restricted aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 100 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(D) Recreational uses. Mixing zones for classified surface waters designated for recreational uses may be allowed by the secretary on an indi-

vidual permit basis in accordance with paragraph (b)(10) of this regulation.

(9) Alternate low flows, as defined in K.A.R. 28-16-28b(b), may be utilized by the department as the critical low flow in the calculation of mixing zone cross-sectional area or volumetric flow for specific water quality criteria. The 30Q10 flow for ammonia or the guaranteed minimum flow provided by a water assurance district, if applicable, shall be used by the department in the calculation of the mixing zone cross-sectional area or volumetric flow. Other alternate low flows, with a specific recurrence frequency and averaging period, shall be considered by the department if those flows will not result in excursions above aquatic life criteria more frequently than once every three years. The right to approve or disapprove any proposed alternate low flow shall be reserved by the department.

(10) Alternate mixing zones employing specific linear distances for mixing zones or alternate stream dilution volumes or cross-sectional areas, or both, may be allowed by the department. Site-specific mixing zones may be allowed if data generated from a site-specific study supports the use of an alternate mixing zone, but still maintains a zone of passage for aquatic life.

(11) Discharges into classified lakes. Mixing zones shall be prohibited by the department from extending into any lake classified as an outstanding national resource water or exceptional state water, or designated as a special aquatic life use water according to K.A.R. 28-16-28d(d). Mixing zones in lakes designated as expected aquatic life use water or restricted aquatic life use waters may be allowed by the department if the mixing zones do not extend farther than 50 meters from the point of effluent discharge or do not comprise more than one percent of the total volume of the receiving lake as measured at the conservation pool.

(12) Discharges into classified ponds. Mixing zones extending into any classified pond shall be prohibited by the department.

(13) Discharges into classified wetlands. Mixing zones shall be prohibited by the department from extending into any classified lacustrine or palustrine wetland as defined in the "corps of engineers wetlands delineation manual," as published in January 1987.

(c) Special conditions. The following special conditions shall not remove the obligation to design, build, or use pollution control structures or

methods to control point and nonpoint sources of pollution as defined in K.A.R. 28-16-28b(ss) and (oo).

(1) Low flow. Any classified stream segment may be exempted by the secretary from the application of some or all of the numeric surface water criteria specified in K.A.R. 28-16-28e(d) if streamflow is less than the critical low flow.

(2) High flow. Any classified stream segment may be exempted by the secretary from the application of the numeric criteria for *E. coli* bacteria specified in tables 1i and 1j of the "Kansas surface water quality standards: tables of numeric criteria," which is adopted by reference in K.A.R. 28-16-28e(d), if any of the following conditions is met:

(A) The flow is equal to or greater than the flow that is exceeded 10 percent of the time for any classified stream segment with a mean flow of less than 30 cubic feet per second.

(B) The flow is equal to or greater than 50 percent of the two-year flood flow for any classified stream segment that has a mean flow of 30 or more cubic feet per second but less than 900 cubic feet per second.

(C) The flow is equal to or greater than the two-year flood flow for any classified stream segment that has a mean flow greater than 900 cubic feet per second.

(3) Effluent-created flow. For any current classified stream segment in which continuous flow is sustained primarily through the discharge of treated effluent and the segment does not otherwise meet the requirements of a classified stream in K.A.R. 28-16-28d(a)(1), the discharger shall not be required to provide treatment beyond that treatment required in the federal secondary treatment regulation, 40 C.F.R. 133.102, dated July 1, 2003, which is hereby adopted by reference. This discharge shall not violate the general surface water quality criteria listed in K.A.R. 28-16-28e(b) or impair any of the existing or attained designated uses of a downstream classified stream segment. If a use attainability analysis demonstrates that the designated uses of a surface water segment are not attainable, then the new use designations for effluent-created flow shall be adopted as specified in K.A.R. 28-16-28d(d)(2) and approved by the environmental protection agency before serving as a basis for limitations in any new, reissued, or modified permit.

(d) Treatment requirements.

(1) All effluent shall receive appropriate mini-

um levels of treatment as required by 40 C.F.R. 122.44, dated July 1, 2003, which is hereby adopted by reference.

(2) Effluent shall receive a higher level of treatment than that stipulated in paragraph (d)(1) of this regulation, if the department determines that this higher level of treatment is needed to fully comply with the terms and conditions of subsection (a) of this regulation or K.A.R. 28-16-28e.

(e) Analytical testing. All methods of sample collection, preservation, and analysis used in applying any of these regulations shall be in accordance with those methods prescribed by the department.

(f) Application of standards to privately owned reservoirs or ponds. The application of water quality standards to privately owned reservoirs or ponds shall be subject to the provisions of K.S.A. 65-171d, and amendments thereto. (Authorized by and implementing K.S.A. 2003 Supp. 65-171d and K.S.A. 65-171m; effective May 1, 1986; amended, T-87-8, May 1, 1986; amended May 1, 1987; amended Aug. 29, 1994; amended July 30, 1999; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Jan. 28, 2005.)

28-16-28d. Surface water classification and use designation. (a) Surface water classification. Surface waters shall be classified as follows:

(1) Classified stream segments shall be those stream segments defined in K.S.A. 82a-2001(a), and amendments thereto.

(2) Classified surface waters other than classified stream segments shall be defined as follows:

(A) Classified lakes shall be all lakes owned by federal, state, county, or municipal authorities and all privately owned lakes that serve as public drinking water supplies or that are open to the general public for primary or secondary contact recreation.

(B) Classified wetlands shall be the following:

(i) All wetlands owned by federal, state, county, or municipal authorities;

(ii) all privately owned wetlands open to the general public for hunting, trapping, or other forms of secondary contact recreation; and

(iii) all wetlands classified as outstanding national resource waters or exceptional state waters, or designated as special aquatic life use waters according to subsection (d) of this regulation.

Wetlands created for the purpose of wastewater

treatment shall not be considered classified wetlands.

(C) Classified ponds shall be all ponds owned by federal, state, county, or municipal authorities and all privately owned ponds that impound water from a classified stream segment as defined in paragraph (a)(1).

(b) The designated uses of classified surface waters other than classified stream segments shall be defined as follows:

(1) "Agricultural water supply use" means the use of classified surface waters other than classified stream segments for agricultural purposes, including the following:

(A) "Irrigation," which means the withdrawal of classified surface waters other than classified stream segments for application onto land; and

(B) "livestock watering," which means the provision of classified surface waters other than classified stream segments to livestock for consumption.

(2) "Aquatic life support use" means the use of classified surface waters other than classified stream segments for the maintenance of the ecological integrity of lakes, wetlands, and ponds, including the sustained growth and propagation of native aquatic life; naturalized, important, recreational aquatic life; and indigenous or migratory semiaquatic or terrestrial wildlife directly or indirectly dependent on classified surface waters other than classified stream segments for survival.

(A) "Special aquatic life use waters" means either classified surface waters other than classified stream segments that contain combinations of habitat types and indigenous biota not found commonly in the state or classified surface waters other than classified stream segments that contain representative populations of threatened or endangered species.

(B) "Expected aquatic life use waters" means classified surface waters other than classified stream segments containing habitat types and indigenous biota commonly found or expected in the state.

(C) "Restricted aquatic life use waters" means classified surface waters other than classified stream segments containing indigenous biota limited in abundance or diversity by the physical quality or availability of habitat, due to natural deficiencies or artificial modifications, compared to more suitable habitats in adjacent waters.

(3) "Domestic water supply use" means the use of classified surface waters other than classi-

fied stream segments, after appropriate treatment, for the production of potable water.

(4) "Food procurement use" means the use of classified surface waters other than classified stream segments for obtaining edible forms of aquatic or semiaquatic life for human consumption.

(5) "Groundwater recharge use" means the use of classified surface waters other than classified stream segments for replenishing fresh or usable groundwater resources. This use may involve the infiltration and percolation of classified surface waters other than classified stream segments through sediments and soils or the direct injection of classified surface waters other than classified stream segments into underground aquifers.

(6) "Industrial water supply use" means the use of classified surface waters other than classified stream segments for nonpotable purposes by industry, including withdrawals for cooling or process water.

(7) "Recreational use" means the use of classified surface waters other than classified stream segments for primary or secondary contact recreation.

(A) "Primary contact recreational use for classified surface waters other than classified stream segments" means the use of classified surface waters other than classified stream segments for recreation on and after April 1 through October 31 of each year, during which the body is immersed to the extent that some inadvertent ingestion of water is probable. This use shall include boating, mussel harvesting, swimming, skin diving, water-skiing, and windsurfing.

(i) "Primary contact recreational use: swimming beach" shall apply to those classified surface waters other than classified stream segments that have posted public swimming areas. These waters shall present a risk of human illness that is no greater than 0.8 percent.

(ii) "Primary contact recreational use: public access" shall apply to those classified surface waters other than classified stream segments where full body contact can occur and that are by law or written permission of the landowner open to and accessible by the public. These waters shall present a risk of human illness that is no greater than 1.0 percent.

(iii) "Primary contact recreational use: restricted access" shall apply to those classified surface waters other than classified stream segments where full body contact can occur and that are not

open to and accessible by the public under Kansas law. These waters shall present a risk of human illness that is no greater than 1.2 percent.

(B) "Secondary contact recreational use for classified surface waters other than classified stream segments" means recreation during which the ingestion of classified surface waters other than classified stream segments is not probable. This use shall include wading, fishing, trapping, and hunting.

(i) "Secondary contact recreational use: public access" shall apply to classified surface waters other than classified stream segments where the surface water is, by law or written permission of the landowner, open to and accessible by the public.

(ii) "Secondary contact recreational use: restricted access" shall apply to classified surface waters other than classified stream segments where the surface water is not open to and accessible by the public under Kansas law.

(c) The designated uses of classified stream segments shall be those defined in K.S.A. 82a-2001(c), and amendments thereto.

(d) Assignment of uses to surface waters.

(1) Classified surface waters shall be designated for uses based upon the results of use attainability analyses conducted in accordance with K.S.A. 82a-2005(a), and amendments thereto. The provisions of the federal water quality standards regulation, 40 C.F.R. 131.10(g)(1) through (g)(6) as in effect on July 1, 2003, shall be followed and are adopted by reference in K.A.R. 28-16-28b(III).

(2) A register of surface water classifications and use designations shall be maintained by the department. This register shall identify the designated uses of all listed major classified streams, lakes, wetlands, and ponds and shall list those streams, lakes, wetlands, and ponds recognized by the department as outstanding national resource waters or exceptional state waters. The use designations of listed surface waters or water bodies recognized as outstanding national resource waters or exceptional state waters shall be those identified in the department's "Kansas surface water register," as adopted by reference in K.A.R. 28-16-28g.

(3) The use designations for classified streams, lakes, wetlands, and ponds not listed in the surface water register shall be determined by the secretary on a case-by-case basis in accordance with the requirements of paragraph (d)(1). (Authorized by

K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 2003 Supp. 65-171d and K.S.A. 2003 Supp. 82a-2001; effective May 1, 1986; amended, T-87-8, May 1, 1986; amended May 1, 1987; amended Aug. 29, 1994; amended July 30, 1999; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Jan. 23, 2004; amended Jan. 28, 2005.)

28-16-28e. Surface water quality criteria.

(a) Criteria development guidance. The development of surface water quality criteria for substances not listed in these standards shall be guided by water quality criteria published by the United States environmental protection agency. If the department finds that the criteria listed in this regulation are underprotective or overprotective for a given surface water segment, appropriate site-specific criteria may be developed and applied by the department, in accordance with K.A.R. 28-16-28f(f), using bioassessment methods or other related scientific procedures, including those procedures consistent with the United States environmental protection agency's "water quality standards handbook," second edition, as published in August 1994, or other department-approved methods.

(b) General criteria for surface waters. The following criteria shall apply to all surface waters, regardless of classification.

(1) Surface waters shall be free, at all times, from the harmful effects of substances that originate from artificial sources of pollution and that produce any public health hazard, nuisance condition, or impairment of a designated use.

(2) Hazardous materials derived from artificial sources, including toxic substances, radioactive isotopes, and infectious microorganisms derived directly or indirectly from point or nonpoint sources, shall not occur in surface waters at concentrations or in combinations that jeopardize the public health or the survival or well-being of livestock, domestic animals, terrestrial wildlife, or aquatic or semiaquatic life.

(3) Surface waters shall be free of all discarded solid materials, including trash, garbage, rubbish, offal, grass clippings, discarded building or construction materials, car bodies, tires, wire, and other unwanted or discarded materials. The placement of stone and concrete rubble for bank stabilization shall be acceptable to the department, if all other required permits are obtained before placement.

(4) Surface waters shall be free of floating de-

bris, scum, foam, froth, and other floating materials directly or indirectly attributable to artificial sources of pollution.

(5) Oil and grease from artificial sources shall not cause any visible film or sheen to form upon the surface of the water or upon submerged substrate or adjoining shorelines, nor shall these materials cause a sludge or emulsion to be deposited beneath the surface of the water or upon the adjoining shorelines.

(6) Surface waters shall be free of deposits of sludge or fine solids attributable to artificial sources of pollution.

(7) Taste-producing and odor-producing substances of artificial origin shall not occur in surface waters at concentrations that interfere with the production of potable water by conventional water treatment processes, that impart an unpalatable flavor to edible aquatic or semiaquatic life or terrestrial wildlife, or that result in noticeable odors in the vicinity of surface waters.

(8) The natural appearance of surface waters shall not be altered by the addition of color-producing or turbidity-producing substances of artificial origin.

(9) In stream segments where background concentrations of naturally occurring substances, including chlorides and sulfates, exceed the water quality criteria listed in table 1a of the "Kansas surface water quality standards: tables of numeric criteria," as adopted by reference in subsection (d) of this regulation, at ambient flow, the existing water quality shall be maintained, and the newly established numeric criteria shall be the background concentration, as defined in K.A.R. 28-16-28b(e). Background concentrations shall be established using the methods outlined in the "Kansas implementation procedures: surface water quality standards," as defined in K.A.R. 28-16-28b(gg), and available upon request from the department.

(c) Criteria for designated uses of surface waters. The numeric criteria in tables 1a, 1b, 1c, 1d, and 1e of the "Kansas surface water quality standards: tables of numeric criteria," as adopted by reference in subsection (d) of this regulation, shall not apply if the critical low flow is less than 0.03 cubic meter per second (1.0 cubic foot per second) for waters designated as expected aquatic life use waters and restricted aquatic life use waters, unless studies conducted or approved by the department show that water present during periods of no flow, or flow below critical low flow, provides important refuges for aquatic life and per-

mits biological recolonization of intermittently flowing segments. The numeric criteria in tables 1a, 1b, 1c, 1d, and 1e, as adopted in subsection (d) of this regulation, shall not apply if the critical low flow is less than 0.003 cubic meter per second (0.1 cubic foot per second) for waters designated as special aquatic life use waters, unless studies conducted or approved by the department show that water present during periods of no flow, or flow below critical low flow, provides important refuges for aquatic life and permits biological recolonization of intermittently flowing segments. The following criteria shall apply to all classified surface waters for the indicated designated uses.

(1) Agricultural water supply use. The water quality criteria for irrigation and livestock watering set forth in table 1a, as adopted in subsection (d) of this regulation, shall not be exceeded outside of mixing zones due to artificial sources of pollution.

(2) Aquatic life support use.

(A) Nutrients. The introduction of plant nutrients into streams, lakes, or wetlands from artificial sources shall be controlled to prevent the accelerated succession or replacement of aquatic biota or the production of undesirable quantities or kinds of aquatic life.

(B) Suspended solids. Suspended solids added to surface waters by artificial sources shall not interfere with the behavior, reproduction, physical habitat, or other factors related to the survival and propagation of aquatic or semiaquatic life or terrestrial wildlife. In the application of this provision, suspended solids associated with discharges of presedimentation sludge from water treatment facilities shall be deemed noninjurious to aquatic and semiaquatic life and terrestrial wildlife, if these discharges comply fully with the requirements of paragraphs (b)(6) and (8) and paragraph (c)(2)(D) of this regulation.

(C) Temperature.

(i) Heat of artificial origin shall not be added to a surface water in excess of the amount that will raise the temperature of the water beyond the mixing zone more than 3° C above natural conditions. Additionally, a discharge to a receiving water shall not lower the temperature of the water beyond the mixing zone more than 3° C below natural conditions. The normal daily and seasonal temperature variations occurring within a surface water before the addition of heated or cooled water of artificial origin shall be maintained.

(ii) Temperature criteria applicable to indus-

trial cooling water recycling reservoirs that meet the requirements for classification specified in K.A.R. 28-16-28d(a)(2) shall be established by the secretary on a case-by-case basis to protect the public health, safety, or the environment.

(D) Toxic substances.

(i) Conditions of acute toxicity shall not occur in classified surface waters outside of zones of initial dilution, nor shall conditions of chronic toxicity occur in classified surface waters outside of mixing zones.

(ii) Acute criteria for the aquatic life support use specified in tables 1a, 1b, and 1c, as adopted in subsection (d) of this regulation, shall apply beyond the zone of initial dilution. Chronic criteria for the aquatic life support use given in tables 1a, 1b, 1d, and 1e, as adopted in subsection (d) of this regulation, shall apply beyond the mixing zone.

(iii) If a discharge contains a toxic substance that lacks any published criteria for the aquatic life support use, or if a discharge contains a mixture of toxic substances capable of additive or synergistic interactions, bioassessment methods and procedures shall be specified by the department to establish whole-effluent toxicity limitations that are consistent with paragraph (c)(2)(D)(i) of this regulation.

(3) Domestic water supply use.

(A) Except as provided in paragraph (c)(3)(B), the criteria listed in table 1a, as adopted in subsection (d) of this regulation, for domestic water supply use shall not be exceeded at any point of domestic water supply diversion.

(B) In stream segments where background concentrations of naturally occurring substances, including chlorides and sulfates, exceed the domestic water supply criteria listed in table 1a, as adopted in subsection (d) of this regulation, at ambient flow, due to intrusion of mineralized groundwater, the existing water quality shall be maintained, and the newly established numeric criteria for domestic water supply shall be the background concentration, as defined in K.A.R. 28-16-28b(e). Background concentrations shall be established using the methods outlined in the "Kansas implementation procedures: surface water quality standards," as defined in K.A.R. 28-16-28b(gg), available upon request from the department.

(C) Any substance derived from an artificial source that, alone or in combination with other synthetic or naturally occurring substances, causes toxic, carcinogenic, teratogenic, or mutagenic ef-

fects in humans shall be limited to nonharmful concentrations in surface waters. Unless site-specific water quality conditions warrant the promulgation of more protective criteria under the provisions of subsection (a) of this regulation and K.A.R. 28-16-28f(f), maximum contaminant levels for toxic, carcinogenic, teratogenic, or mutagenic substances promulgated by the United States environmental protection agency pursuant to 40 C.F.R. 141.11 through 141.16 and 40 C.F.R. 141.60 through 141.66, dated July 1, 2003 and adopted by reference in K.A.R. 28-16-28b(hh), shall be deemed nonharmful by the department and adopted as domestic water supply criteria.

(D) The introduction of plant nutrients into surface waters designated for domestic water supply use shall be controlled to prevent interference with the production of drinking water.

(4) Food procurement use.

(A) Criteria listed in table 1a, as adopted in subsection (d) of this regulation, for food procurement use shall not be exceeded outside of a mixing zone due to any artificial source of pollution.

(B) Substances that can bioaccumulate in the tissues of edible aquatic or semiaquatic life or wildlife through bioconcentration or biomagnification shall be limited in surface waters to concentrations that result in no harm to human consumers of these tissues. For bioaccumulative carcinogens, surface water concentrations corresponding to a cancer risk level of less than 0.000001 (10^{-6}) in human consumers of aquatic or semiaquatic life or wildlife shall be deemed nonharmful by the department and adopted as food procurement criteria. Average rates of tissue consumption and lifetime exposure shall be assumed by the department in the estimation of the cancer risk level.

(5) Groundwater recharge use. In surface waters designated for the groundwater recharge use, water quality shall be such that, at a minimum, degradation of groundwater quality does not occur. Degradation shall include any statistically significant increase in the concentration of any chemical or radiological contaminant or infectious microorganism in groundwater resulting from surface water infiltration or injection.

(6) Industrial water supply use. Surface water quality criteria for industrial water supplies shall be determined by the secretary on a case-by-case basis to protect the public health, safety, or the environment.

(7) Recreational use.

(A) General. The introduction of plant nutrients into surface waters designated for primary or secondary contact recreational use shall be controlled to prevent the development of objectionable concentrations of algae or algal by-products or nuisance growths of submersed, floating, or emergent aquatic vegetation.

(B) Primary contact recreation for classified surface waters other than classified stream segments. A single sample maximum or a geometric mean of at least five samples collected during separate 24-hour periods within a 30-day period shall not exceed the criteria in table 1j, as adopted in subsection (d) of this regulation, beyond the mixing zone.

(C) Secondary contact recreational use for classified surface waters other than classified stream segments. A single sample maximum or a geometric mean of at least five samples collected during separate 24-hour periods within a 30-day period shall not exceed the criteria in table 1j, as adopted in subsection (d) of this regulation, beyond the mixing zone.

(D) Primary contact recreation for classified stream segments. At least five samples shall be collected during separate 24-hour periods within a 30-day period. A geometric mean analysis of these samples shall not exceed the criteria in table 1i, as adopted in subsection (d) of this regulation, beyond the mixing zone.

(E) Secondary contact recreation for classified stream segments. The following criteria shall be in effect from January 1 through December 31 of each year. At least five samples shall be collected during separate 24-hour periods within a 30-day period. A geometric mean analysis of these samples shall not exceed the criteria in table 1i, as adopted in subsection (d) of this regulation, beyond the mixing zone.

(F) Wastewater effluent shall be disinfected if it is determined by the department that the discharge of nondisinfected wastewater constitutes an actual or potential threat to public health. Situations that constitute an actual or potential threat to public health shall include instances in which there is a reasonable potential for the discharge to exceed the applicable criteria supporting the assigned recreational use designation or if a water body is known or likely to be used for either of the following:

- (i) Primary or secondary contact recreation; or
- (ii) any domestic water supply.

(8) Multiple uses. If a classified stream segment or classified surface water other than a classified stream segment is designated for more than one designated use according to K.A.R. 28-16-28d(d), the water quality of the classified stream segment or classified surface water other than a classified stream segment shall comply with the most stringent of the applicable water quality criteria.

(d) Tables. The numeric criteria for the designated uses of classified surface waters shall be the numeric criteria specified in the department's "Kansas surface water quality standards: tables of numeric criteria," dated December 6, 2004, which is hereby adopted by reference. (Authorized by K.S.A. 2003 Supp. 65-171d, K.S.A. 65-171m, and K.S.A. 2003 Supp. 82a-2001; implementing K.S.A. 2003 Supp. 65-171d, K.S.A. 65-171m, K.S.A. 2003 Supp. 82a-2001; effective May 1, 1986; amended, T-87-8, May 1, 1986; amended May 1, 1987; amended Aug. 29, 1994; amended July 30, 1999; amended Nov. 3, 2000; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Oct. 24, 2003; amended Jan. 28, 2005.)

28-16-28f. Administration of surface water quality standards. (a) Review and revision. At least once every three years, a public hearing shall be held for the purpose of reviewing and, as appropriate, modifying the surface water quality standards and the surface water register.

(b) Application of modified surface water quality standards. A modification to the surface water quality standards, the surface water register, or both, shall have no effect on the requirements of any existing enforceable discharge permit issued under K.S.A. 65-165, and amendments thereto, unless the discharge fails to meet the requirements of the permit or the department has reason to believe that continuation of the discharge will result in a potential or actual public health hazard or in irreversible water use impairments.

(c) Water quality certification. No action identified in this subsection shall be taken unless the department has issued a water quality certification for the following:

- (1) Any action requiring a federal license or permit pursuant to the federal clean water act;
- (2) any action subject to the permitting provisions of K.S.A. 65-165, and amendments thereto;
- (3) any water development project subject to

the provisions of K.S.A. 82a-325 et seq., and amendments thereto; and

(4) any action undertaken by any Kansas state agency that, in the opinion of the secretary, has a potential water quality impact.

(d) Compliance schedules.

(1) Except as provided in paragraph (d)(2) in this regulation, compliance schedules contained in any discharge permit or license issued by the department pursuant to the federal clean water act or K.S.A. 65-165, and amendments thereto, shall not extend more than three years beyond the date of permit issuance.

(2) Compliance schedules of up to five years in total duration may be granted if it is demonstrated that the strict application of paragraph (d)(1) in this regulation is not feasible due to construction scheduling constraints or other technical limitations.

(e) Variances. If, upon written application by any person, the secretary finds that by reason of substantial and widespread socioeconomic impact the strict enforcement of the water quality criteria of K.A.R. 28-16-28e(c) is not feasible, a variance may be permitted by the secretary.

(1) The provisions of 40 C.F.R. 131.10(g), as adopted by reference in K.A.R. 28-16-28b(III), shall be considered by the secretary in reviewing the need for a variance.

(2) In granting a variance, conditions and time limitations may be set by the secretary with the intent that progress be made toward improvements in surface water quality.

(3) Each variance shall be granted only after public notification and opportunity for public comment. Each variance, once granted, shall be adopted into the regulations at the next systematic review or subsequent triennial review.

(4) No action that impacts upon water quality shall be granted a variance from the terms and conditions of K.A.R. 28-16-28e(b).

(f) Site-specific criteria. Whenever the secretary proposes to use any site-specific criterion, a public notice stating the intention to use a site-specific criterion shall be issued by the department. The public notice shall include a description of the affected surface water or surface water segment and the reasons for applying the proposed criterion. If the secretary determines that there is significant public interest, a public hearing shall be held in the geographical vicinity of the affected surface water or surface water segment. A public notice of the final site-specific criterion

shall be published in the Kansas register. Each site-specific criterion, once developed, shall be adopted into the regulations at the next systematic review or subsequent triennial review.

(g) Enforcement. Upon finding a violation of the surface water quality standards, an investigation to determine the cause of the violation shall be conducted by the department. If the department finds the violation to be caused by an artificial source of pollution, the person or persons responsible for the source of pollution shall be required by the department to initiate corrective actions that restore the designated uses of the affected surface water or surface water segment impaired by the violation and provide for the return of the original surface water quality conditions. Nothing in this regulation shall abridge the right of the department to proceed with enforcement actions as provided in other Kansas statutes, regulations, or both. (Authorized by K.S.A. 2003 Supp. 65-171d and K.S.A. 65-171m; implementing K.S.A. 65-164, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-171m; effective May 1, 1986; amended Aug. 29, 1994; amended July 30, 1999; amended Jan. 28, 2005.)

28-16-28g. Surface water register. The classification and use designations of surface waters of the state shall be those identified in the department's "Kansas surface water register," dated December 19, 2007, which is hereby adopted by reference. (Authorized by K.S.A. 2007 Supp. 82a-2010; implementing K.S.A. 2007 Supp. 82a-2001, 82a-2002, 82a-2003, 82a-2004, and 82a-2005; effective Jan. 28, 2005; amended May 20, 2005; amended Sept. 15, 2006; amended May 25, 2007; amended June 6, 2008.)

28-16-29. (Authorized by K.S.A. 1976 Supp. 65-4512; effective, E-77-43, Sept. 23, 1976; effective Feb. 15, 1977; revoked Sept. 28, 1992.)

WATER AND WASTEWATER OPERATOR CERTIFICATION

28-16-30. Requirements for water and wastewater operator certification. (a) Each operator who desires or is required to obtain a water supply system or wastewater treatment facility operator certificate shall meet the following requirements:

(1) Each applicant shall own or be either employed by or under contract to persons having a water supply system or wastewater treatment fa-

cility and shall be engaged in the daily operation, maintenance, or both, of the system or facility.

(2) Each applicant shall submit a completed and approved examination application and the appropriate fee to the department. The application shall be received by the department at least two weeks before the test date. Late applications shall not be accepted for any test date.

(3) Each applicant shall be a high school graduate or shall have a general education development (GED) diploma.

(b) If an applicant provides false information on the application, the applicant shall not be accepted for examination and the fee shall not be returned. The applicant shall be notified of this decision and shall not be allowed to take the examination for two years.

(c) The applicant who previously held a Kansas water supply system or wastewater treatment facility certificate that was revoked pursuant to K.S.A. 65-4507, and amendments thereto, shall not be eligible to submit an application for examination for a period of one year from the date of the final action revoking the certificate or for the period of time specified in the final action. (Authorized by and implementing K.S.A. 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-31. Eligibility for water and wastewater operator certification. (a) Each applicant for certification shall meet eligibility requirements as noted in the following table.

CERTIFICATE CLASS	POINTS	EXPERIENCE
Small System	12.5	6 months
I	13.0	1 year
II	14.0	1 year
III	16.0	2 years
IV	18.0	2 years

(1) Point totals shall be determined using the following table.

EXPERIENCE OR EDUCATION	POINTS
Each year of operating experience	1.0
High school graduation (GED or equivalent)	12.0
Each full year of college (30 hours credit)	1.0
Each department-approved educational course (10 consecutive contact hours)	0.25
Successful completion of California state university correspondence courses (each volume)	1.0
Department-approved semester courses (60 contact hours)	1.5
Department-approved two-year environmental technology degree	6.0

(2) Completion of an approved two-year environmental technology degree shall fulfill the one

year of experience requirement for taking a Class I examination.

(b) Minimum training requirements. Each operator who holds a certificate of competency shall be required to meet minimum training requirements before certificate renewal. All Class I, II, III, and IV certified operators shall acquire at least 10 hours of approved training every two years. Small system operators shall acquire five hours of approved training every two years.

(c) Each operator who conducts approved training for water supply system operators and wastewater treatment facility operators may receive credit equal to the number of hours of training provided. Credit shall be granted for teaching a department-approved course or seminar only in its initial presentation. (Authorized by and implementing K.S.A. 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-32. Operator certification examinations. (a) To be certified, each applicant shall pass the appropriate written examination. A score of 70% or higher shall be considered a passing score.

(b) Examinations shall be given at least twice each year at times and locations set by the department. Notice of examinations shall be sent to certified operators and either communities or districts having a water supply system or wastewater treatment facility, or both, at least 30 days before the date of examination.

(c) The written examinations shall be graded by the department or by a department-approved contractor, and the applicant shall be notified of the results. Examinations shall not be returned to the applicant. Upon receiving a written request, an analysis of the failed examination shall be provided to the applicant. The analysis shall indicate areas in which the applicant needs further study.

(d) Any operator meeting the requirements of K.A.R. 28-16-30 and K.A.R. 28-16-31 may take the same level of examination a maximum of three times per calendar year.

(e) Each operator earning a score of 50% or lower shall provide proof of having attained department-approved training before sitting for a subsequent examination.

(f) An applicant who commits any of the following acts on a written examination shall be deemed guilty of misconduct:

(1) Utilizes text materials, notes, computer-

stored materials, or other unauthorized materials while taking an examination; or

(2) without express authorization from examination officials, undertakes any of the following:

(A) Removes or attempts to remove examination materials furnished by the department from the examination room;

(B) aids another applicant, or accepts aid from another applicant in answering examination questions during a written examination; or

(C) makes or attempts to make a manual or electronic copy of the written examination.

(g) If an applicant is guilty of misconduct on a written examination, as determined by the department, both of the following penalties shall apply:

(1) The applicant shall be denied a certificate of competency.

(2) The applicant shall be ineligible to reapply for certification in any operator classification for a period of one year from the date on which the determination of misconduct becomes final.

(h) A hearing for each denial of a certificate of competency shall be held in accordance with the Kansas administrative procedure act upon written notice of the department's intention to deny any certificate. (Authorized by and implementing K.S.A. 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-33. Operator responsible for the operation and management of a water supply system or wastewater treatment facility, or both. (a) (1) Each system or facility shall have an individual or individuals in responsible charge at the system or facility site, or available at all times.

(2) For the purposes of this regulation, "individual or individuals in responsible charge" shall be defined as the person or persons designated by the owner to be the certified operator or operators who make decisions regarding the daily operational activities of a water supply system or wastewater treatment facility that will directly impact the quality or quantity of drinking water for human consumption or the quality of wastewater effluent.

(b) Except as provided in K.A.R. 28-16-33(f), each individual in responsible charge of a system shall be a certified operator for that class or a higher class of system.

(c) When a new operator responsible for the operation or management of a system or facility classified as small system, class I, or class II is

hired, the owner of the system or facility shall, on a form provided by the department, notify the department within 30 days. The person named on the form shall be issued an operator-in-training (OIT) certificate subject to both of the following requirements:

(1) Within six months after completing one full year of operation as an OIT, the operator-in-training shall take the appropriate certification examination.

(2) If the OIT fails the initial examination, the OIT shall make additional preparation and take the examination again at the next time that the department offers the examination.

(d) An OIT certificate shall be valid for one year from the date of issuance. The OIT certificate may be renewed for up to an additional year if the operator demonstrates to the department that the operator is attending training sessions, studying correspondence courses, or otherwise preparing to pass the operator certification examination.

(e) The owner of a system or facility shall not be allowed to utilize an OIT for more than two consecutive years.

(f) An operator with an OIT certificate may be the individual in responsible charge of a system subject to the following:

(1) A written request submitted to the department by the system owner and verification by the owner that the system is unable to employ a currently certified operator; and

(2) a finding by the department that the operator has the basic knowledge necessary to operate the system. The following items shall be the basis for the department's decision:

(A) The results of any on-site inspection of the system;

(B) a review of the operational history of the system; and

(C) an examination of other available information. (Authorized by and implementing K.S.A. 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-34. Issuance and renewal of certificate of competency. (a) Upon satisfactory fulfillment of the requirements specified in K.A.R. 28-16-30, a certificate of competency shall be issued to the applicant. The certificate shall designate the class or classes of either water supply systems or wastewater treatment facilities for which the applicant has received certification to

operate. The certificate shall be valid for two years from date of issuance.

(b) The certificate shall expire unless renewed as specified in this regulation before the expiration date. A renewal notice and application form shall be mailed to the last address of record approximately 45 calendar days before the expiration date of the certificate. Failure to receive the notice shall not relieve the certified operator of the responsibility to renew the certificate.

(c) In order to renew a certificate before it expires, the certified operator shall complete the following requirements before the expiration date of the certificate:

(1) Meet the training requirements specified in K.A.R. 28-16-31(b);

(2) submit an application for renewal on a form provided by the department; and

(3) submit the nonrefundable two-year renewal fee specified in K.A.R. 28-16-35 to the department.

(d) An expired certificate may be reinstated within two years of the expiration date, subject to K.A.R. 28-16-34(c)(1) through (3) and the reinstatement fee specified in K.A.R. 28-16-35. In each case of reinstatement, the expiration date of the reinstated operator certificate shall be the same as if the renewal requirements had been met on or before the date of expiration.

(e) Each operator certificate that is expired and is not reinstated within two years after the expiration date shall not be reinstated. Each operator failing to reinstate an expired certificate within two years after the date of expiration shall meet the requirements of K.A.R. 28-16-30, apply for examination, pay all required fees, and pass the examination in order to obtain certification. (Authorized by and implementing K.S.A. 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-35. Operator certification fees.

(a) Fees for certification shall be the following:

OIT (one-year certificate)	No charge
OIT (renewal for one year)	\$5.00
Examination fee	\$25.00
Two-year renewal for all classes except OIT	\$20.00
Reinstatement of lapsed certificate up to and including one year after renewal date	\$15.00
between one and two years after renewal date	\$25.00
One-year reciprocity fee	\$25.00

(b) Fees from applicants who are ineligible to take the certification examination shall be returned. No other fees shall be returned. Fees for

department-sponsored training sessions shall be established by the department. (Authorized by and implementing K.S.A. 65-4512 and 65-4513; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-36. Classification of water supply systems and wastewater treatment facilities.

(a) The owner of each water supply system and wastewater treatment facility shall designate an operator in responsible charge of the system or facility, or both, whose qualifications are commensurate with the following:

SYSTEM OR FACILITY CLASS	OPERATOR CLASS
Small System	Small System, I, II, III, or IV
I	I, II, III, or IV
II	II, III, or IV
III	III or IV
IV	IV

(b) Classification of water supply systems shall be as follows:

CLASS	POPULATION SERVED
Small System	
Distribution system only	All, no limit or
Chlorination of groundwater only	less than 501
Class I	
Chlorination of groundwater only	501-1,500 or
Treatment of groundwater	less than 501
Class II	
Chlorination of groundwater only	1,501-5,000 or
Treatment of groundwater	501-2,500 or
Treatment of surface water	less than 2,501
Class III	
Chlorination of groundwater only	5,001-20,000 or
Treatment of groundwater or surface water	2,501-10,000
Class IV	
Chlorination of groundwater only	over 20,000 or
Treatment of groundwater or surface water	over 10,000

(c) Classification of commercial, industrial, and municipal wastewater treatment facilities shall be as follows:

CLASS	POPULATION SERVED
Small Systems	
Nonoverflowing municipal wastewater ponds	All, no limit
Class I	
Any secondary treatment facility	less than 1,000

or Overflowing wastewater ponds	All, no limit POPULATION SERVED
CLASS	
Class II	
Any secondary treatment facility	1,001-5,000
Class III	
Any secondary treatment facility	5,001-25,000
or	
Advanced or specialized treatment facility	less than or equal to 5,000
Class IV	
Any secondary treatment facility	over 25,000
or	
Advanced or specialized treatment facility	over 5,000

(d) For purposes of this regulation, "treatment," as it applies to water supply systems, shall include the following processes:

- (1) Iron and manganese removal;
- (2) membrane filtration;
- (3) softening;
- (4) coagulation, sedimentation, and filtration;
- (5) recarbonation; and
- (6) addition of chemicals other than chlorine

for improved water quality.

(e) For purposes of this regulation, "secondary treatment facility" shall be any department-permitted biological treatment facility, including the following:

- (1) Waste stabilization ponds;
- (2) trickling filter plants;
- (3) rotating biological contactor plants; and
- (4) activated sludge plants.

A secondary treatment facility may include biological, physical, or chemical disinfection.

(f) For purposes of this regulation "advanced or specialized treatment facility" shall include facilities utilizing selected biological, physical, and chemical separation processes to remove organic and inorganic substances that resist conventional treatment practices. Biological, physical, and chemical disinfection shall not be considered advanced or specialized treatment. (Authorized by K.S.A. 65-4512; implementing K.S.A. 65-4505 and 65-4512; effective Sept. 28, 1992; amended Aug. 31, 2001.)

28-16-37 to 28-16-49. Reserved.

**STATE GRANTS TO MUNICIPALITIES
FOR THE CONSTRUCTION OF WATER
POLLUTION CONTROL PROJECTS
BENEFITING FROM FEDERAL GRANTS**

28-16-50 to 28-16-54. (Authorized by K.S.A. 1971 Supp. 65-3305; effective, E-71-16,

April 1, 1971; effective Jan. 1, 1972; revoked May 10, 1996.)

28-16-55. Inspection of sewerage systems during construction and prohibited connections. This regulation pertains to the inspection of all components of a sewerage system during construction including, but not limited to, treatment facilities, lift stations and force mains, outfall sewers, interceptor sewers, main and lateral sewers and their extensions, manholes, clean-outs, and building sewers.

I. *Definitions:* Where used in these regulations the following terms shall be understood to have the meaning as given below in their corresponding definitions regardless of any other meaning which may be implied by common or local usage. (A) *Areaways.* An areaway is a sunken yard, patio, court, driveway or window well leading into a basement or crawlspace for entrance, light or ventilation.

(B) *Building.* A building is a structure built, erected, or framed of component structural parts designed for the housing, shelter, enclosure, or support of persons, animals, equipment or property of any kind.

(C) *Building drain.* The building drain is that part of the lowest piping of a drainage system which receives the discharge from soil, waste, and other drainage pipes inside the walls of the building and conveys it to the building sewer beginning three (3) feet outside the building wall.

(D) *Building sewer.* The building sewer is that part of the piping of a drainage system which extends from the end of the building drain and which receives the discharge of the building drain and conveys it to a public sanitary sewer, private sanitary sewer, individual sewage disposal system, or other point of disposal.

(E) *Crawlspace drain.* A crawlspace drain is a drain installed to collect drainage from the surface of any area that is entirely enclosed by foundation walls and beneath a building which area is not covered by a concrete or other form of permanent surfacing.

(F) *Garage drain.* A garage drain is a drain located in a garage or, in case of a basement garage, within ten (10) feet of garage area.

(G) *Inspector.* An inspector shall be a consulting engineer, municipal engineer, sewer district engineer, county engineer, or his authorized representative.

installed to collect stormwater from building roofs.

(I) *Saddle*. A saddle is a fitting attached to an existing sanitary sewer to receive a building sewer connection.

(J) *Sanitary sewer (sewer)*. A sanitary sewer (sewer) shall mean a pipe which carries sewage and insofar as practical, excludes infiltration of storm, surface and ground water.

(K) *Sewage*. Sewage is any substance that contains any of the waste products or excrementitious or other discharges from the bodies of human beings, animals, or chemical or other wastes from domestic, manufacturing or other forms of industry.

(L) *Shall*. The word "shall" is a mandatory term.

(M) *Foundation drains*. A foundation drain is a pipe with open joints and/or porous material installed either outside exterior foundation walls or inside and beneath a basement floor for the purpose of preventing the build-up of water pressure and water capillarity beneath the floor.

II. *Inspection of sewerage system construction:*
(A) *Treatment facilities, mains and laterals*. All sewerage construction projects shall have continuous inspections by a qualified inspector during active phases of sewerage construction to insure that they comply with plans and specifications approved by the Kansas state department of health and to insure elimination of extraneous surface and groundwater. This shall include inspection of all sewers and manholes before they are covered but after the sewers are bedded.

(B) *Building sewers*. All building sewers shall be constructed of materials which are approved by the state department of health for the construction of lateral sewers. Building sewers shall be left uncovered until inspected. In case of saddle connections, after the saddle hole has been made in the receiving pipe, the pipe thoroughly cleaned and all excavation and bracing has been completed for the encasement, the inspector shall see the saddle installed and properly anchored.

(C) *Prohibited connections*. No roof, areaway, garage, or foundation drain shall be connected with or flow into any building or sanitary sewer.

III. *Municipal regulations and fees*. These regulations do not affect the right of the municipality to adopt stricter regulations, connection fees, connection and use permits, and sewer service charges. (Authorized by K.S.A. 65-171d; effective, E-74-7, Nov. 26, 1973; effective May 1, 1975.)

28-16-56. (Authorized by K.S.A. 1975 Supp. 65-166a; effective, E-74-7, Nov. 26, 1973; effective, E-76-3, Jan. 1, 1975; effective May 1, 1975; amended, E-76-39, Aug. 1, 1975; amended May 1, 1976; revoked, T-85-30, Nov. 14, 1984; revoked May 1, 1985.)

28-16-56a. (Authorized by and implementing K.S.A. 65-166a; effective, T-85-30, Nov. 14, 1984; effective May 1, 1985; amended May 1, 1986; amended May 1, 1988; revoked Sept. 27, 1996.)

28-16-56b. (Authorized by and implementing K.S.A. 1984 65-166a; effective, T-85-30, Nov. 14, 1984; effective May 1, 1985; revoked Sept. 27, 1996.)

28-16-56c. Sewage permit fees; definitions. For the purposes of K.A.R. 28-16-56d, the following terms shall be defined as specified in this regulation:

(a) "Animal unit," for the purpose of determining permit fees, has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(b) "Animal unit capacity" means the maximum number of animal units that a confined feeding facility is designed to accommodate at any one time.

(c) "Commercial wastewater treatment facility" means a facility serving a commercial enterprise or group or a combination of commercial enterprises, for the purpose of treating primarily domestic sewage by physical, chemical, or biological means or by a combination of these methods. This term shall include any slaughterhouse with an average slaughter rate of 50 animals or less per week.

(d) "Confined feeding facility" has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(e) "Cooling water discharge" means cooling water discharged from any system in which there is no contact with process pollutants and there is no measured chemical buildup.

(f) "Dewatering discharge" means a discharge resulting from the drainage or removal of water from a lagoon, quarry, pit, or any other holding device. This term shall not include any discharge in which there is a measured chemical buildup or to which chemicals have been added for any purpose.

(g) "Domestic sewage" means sewage originating primarily from kitchen, bathroom, and laundry

sources, including waste from food preparation, dishwashing, garbage grinding, toilets, baths, showers, and sinks.

(h) "General permit" has the meaning specified in 40 CFR 122.2 and adopted by reference in K.A.R. 28-16-151.

(i) "Industrial wastewater treatment facility" means a facility treating primarily sewage or process-generated wastewater, other than domestic sewage, by physical, chemical, or biological means or by a combination of these methods.

This term shall not include any private truck-washing or trailer-washing facility for washing animal waste from not more than two trucks or trailers, or a combination of both, owned by the private truck-washing or trailer-washing facility.

(j) "Municipal wastewater treatment facility" means a facility serving a city, county, township, sewer district, or other local governmental unit, or a facility serving a state or federal agency, establishment, or institution, for the purpose of treating primarily domestic sewage by physical, chemical, or biological means or by a combination of these methods.

(k) "Point source" means any discernible, confined, and discrete conveyance from which pollutants are or can be discharged, including any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, confined animal feeding facility, landfill leachate collection system, and any vessel or other floating craft. This term shall not include the return flows from irrigated agriculture or agricultural storm water runoff.

(l) "Pretreatment permit" means a permit that is issued to a source subject to pretreatment standards and that discharges to a municipal wastewater treatment facility not having an approved pretreatment program.

(m) "Private truck-washing facility for animal wastes" means a truck-washing facility for animal wastes that exists primarily for the purpose of washing animal wastes from trucks or trailers owned by the facility.

(n) "Sewage" has the meaning specified in K.S.A. 65-164, and amendments thereto.

(o) "Storm water discharge" means any discharge of storm water runoff from a point source. This term may include any of the following:

(1) Storm water runoff from a municipal, industrial, or commercial facility or from a construction site;

(2) a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff; or

(3) a system of discharges from municipal storm sewers that are separate from sanitary sewers.

(p) "Treated cooling water discharge" means cooling water discharged from any system in which there is no contact with process pollutants and there is no measured chemical buildup other than chemicals added for biological or corrosion control, or from evaporative losses.

(q) "Truck-washing facility for animal wastes" means a truck-washing facility that exists primarily for the purpose of washing animal wastes from trucks or trailers. (Authorized by and implementing K.S.A. 2003 Supp. 65-171d; effective Sept. 27, 1996; amended March 16, 2007.)

28-16-56d. Sewage permit fees; schedules. (a) Each person applying for a permit pursuant to K.S.A. 65-165, and amendments thereto, and each holder of a permit issued pursuant to K.S.A. 65-165, and amendments thereto, shall submit the appropriate fee in accordance with the following schedule:

Schedule of Fees at Annual Rate

<i>Classification</i>	<i>Unit Rates and Minimum Rates</i>
(1) Municipal or commercial wastewater treatment facility.	\$185/year/million gallons per day permitted capacity and for any portion thereof. \$185 minimum fee per year.
(2) Municipal storm water system.	
(A) population less than 100,000 persons.	None
(B) population of 100,000 persons or greater.	\$2,000 per year.
(3) Industrial wastewater treatment facility.	\$320/year/million gallons per day permitted capacity and for any portion thereof. \$320 minimum fee per year.
(4) Cooling water discharge. Surface disposal:	
(A) Non-contact cooling water.	\$60 per year.
(B) treated cooling water.	\$120/year/million gallons per day permitted capacity and for any portion thereof. \$120 minimum fee per year.

<i>Classification</i>	<i>Unit Rates and Minimum Rates</i>
(5) Dewatering discharge.	\$60 per year.
(6) Pretreatment permit.	\$320 per year.
(7) General permit.	\$60 per year.
(8) Industrial storm water discharge.	
(A) General permit.	\$60 per year.
(B) individual permit.	\$320 per year.
(9) Confined feeding facility or public livestock market required to register or obtain a permit:	
(A) Initial registration fee, regardless of animal unit capacity	\$25 one-time fee.
(B) permit fee:	
(i) Animal unit capacity of 999 or less	\$25 per year.
(ii) animal unit capacity of 1,000-4,999	\$100 per year.
(iii) animal unit capacity of 5,000-9,999	\$200 per year.
(iv) animal unit capacity of 10,000 or more.	\$400 per year.
(10) Truck-washing facility for animal wastes.	
(A) Private truck-washing facility for animal wastes with any combination of owned trailers or trucks totaling no more than two	\$25 per year.
(B) Private truck-washing facility for animal wastes with any combination of owned trailers or trucks totaling more than two	\$200 per year.
(C) all other truck-washing facilities for animal wastes.	\$320 per year.

(b)(1) Plans and specifications shall not be reviewed and processing and issuance of a permit shall not take place until the required fee is paid. Fees shall be made payable to the "Kansas department of health and environment—water pollution control permit."

(2) Fees paid in accordance with the schedule in subsection (a), including fees paid for facilities that are never built or that are abandoned, shall not be refunded.

(3) Each operator who is operating a facility in which two or more of the wastewaters identified in subsection (a) are discharged shall pay the appropriate fee for each type of wastewater discharged, even if only one permit has been issued for the facility.

(4) Permit fees shall be based on the minimum

rate or unit rate, whichever is greater. The full unit rate shall be applied to any portion of a unit. The fee per unit shall not be prorated.

(5) A permit fee shall be paid annually in accordance with subsection (a).

(6) If ownership of the permitted facility changes during the term of a valid permit, no additional fee shall be required unless a change occurs that results in a new or expanded facility or operation.

(7) If a change occurs during the term of a valid permit that results in an expanded capacity of the facility or operation, a new application shall be required. Upon approval, the existing permit shall be amended and shall continue in effect for the remainder of the original term, unless revoked. The additional fee shall be based only on the difference between the original permitted capacity and the expanded capacity. The new annual fee for the expanded facility shall be based on the unit rate at the expanded capacity or the minimum rate, whichever is greater, for the remainder of the term of the permit. (Authorized by and implementing K.S.A. 2003 Supp. 65-166a and 65-171d; effective Sept. 27, 1996; amended March 16, 2007.)

28-16-57. (Authorized by K.S.A. 65-171d, as amended by L. 1986, Ch. 204, Sec. 3, Sec. 6 and L. 1986, Ch. 201, Sec. 22; implementing K.S.A. 65-165, 65-166; effective, E-74-32, June 14, 1974; effective May 1, 1975; amended May 1, 1987; revoked March 23, 2001.)

28-16-57a. Effluent standards. (a) Incorporation. 40 C.F.R. Parts 133, 405 through 436, 439, 440, 443, 446, 447, 454, 455, 457 through 461, 463, 465, and 469, as in effect on July 1, 1985, are adopted by reference.

(b) To the extent that the above effluent limitations are inapplicable, the limitations shall be set on a case-by-case basis using the methodology described in 40 CFR Sections 122.44(a) and 125.3(c)(2) as in effect on July 1, 1985. (Authorized by K.S.A. 65-171d, as amended by L. 1986, Ch. 204, Sec. 3, Sec. 6 and L. 1986, Ch. 201, Sec. 22, implementing K.S.A. 65-171d as amended by L. 1986, Ch. 204, Sec. 3, Sec. 6 and L. 1986, Ch. 201, Sec. 22, effective May 1, 1987.)

28-16-58. Definitions. These terms shall have the following meanings: (a) (1) "Administra-

tor” means the administrator of the United States environmental protection agency.

(2) “Application” means all documents required by the division that are necessary for obtaining a permit.

(3) “Department” and “KDHE” mean the Kansas department of health and environment.

(4) “Director” means the director of the division of environment, Kansas department of health and environment.

(5) “Division” means the division of environment, Kansas department of health and environment.

(6) “Draft permit” means a permit that has not been issued as a final action of the agency.

(7) “EPA” means the United States environmental protection agency.

(8) “Kansas implementation procedures: wastewater permitting” means the procedures dated June 17, 2004 and written and used by the department for the development of national pollutant discharge elimination system permit limitations, available upon request from the division of environment.

(9) “Minimum standards of design, construction, and maintenance” means effluent standards, effluent limitations, pretreatment standards, other performance standards, and other standards of design, construction, and maintenance for wastewater control facilities published by the department in 1978 as “minimum standards of design for water pollution control facilities.”

(10) “Municipal system” means a system under the jurisdiction of a city, county, township, district, or other governmental unit.

(11) “National pollutant discharge elimination system” and “NPDES” mean the national system for the issuance of permits under 33 U.S.C. Section 1342 and shall include any state or interstate program that has been approved by the administrator, in whole or in part, pursuant to 33 U.S.C. Section 1342.

(12) “Refuse act application” means an application for a permit under 33 U.S.C. Section 407, commonly known as the refuse act, of 33 U.S.C. Chapter 9, “protection of navigable waters and of harbor and river improvements generally.”

(13) “Regional administrator” means the regional administrator for region VII of the United States environmental protection agency.

(14) “Secretary” means the secretary of the Kansas department of health and environment.

(15) “Water quality standards” means all water

quality standards, as specified in K.A.R. 28-16-28b through K.A.R. 28-16-28g, to which a discharge is subject.

(16) “Waters of the state” means all surface and subsurface waters occurring within the border of the state, or forming part of the border between Kansas and one of the adjoining states.

(b) The definitions of the following terms contained in 33 U.S.C. Section 1362, as amended February 4, 1987 and hereby adopted by reference, shall be applicable to these terms as used in K.A.R. 28-16-57 through K.A.R. 28-16-63, unless the context requires otherwise:

(1) “Biological monitoring”;

(2) “effluent limitations”;

(3) “industrial user”;

(4) “municipality”;

(5) “person”;

(6) “state”; and

(7) “toxic pollutant.” (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-165, K.S.A. 65-166, and K.S.A. 2003 Supp. 65-171d; effective, E-74-32, June 14, 1974; effective May 1, 1975; amended May 1, 1987; amended Aug. 31, 2001; amended Jan. 28, 2005.)

28-16-59. Filing of applications. (a) Each person presently discharging or having a potential to discharge pollutants into any “waters of the state” shall file one copy of the appropriate application within 30 days of a written notification by the division.

(b) Each person proposing commencement of a discharge of pollutants after enactment of these regulations shall file a complete application:

(1) no less than 180 days in advance of the date on which the person desires to commence the discharge of pollutants; or

(2) in sufficient time prior to commencement of the discharge of pollutants to insure compliance with the requirements of state or federal law.

(c) Each application shall be considered to be complete when the appropriate fee has been paid in accordance with K.A.R. 28-16-56c and 28-16-56d and when the applicant has filed:

(1) A refuse act application and any additional information required by the director; or

(2) a complete application form, as prescribed for the type, category, or size of discharge, facility, or activity, and plans, specifications and an engineering report in accordance with K.A.R. 28-16-1 through 28-16-7 and any additional information required by the director.

(d) Notification to and approval by the director is required prior to any of the following:

(1) The connection of an industrial waste discharge to a municipal system or the addition of a new process or product by an existing industrial facility;

(2) A significant change in disposal method, including change from a land disposal to direct discharge to water, or a change in the method of treatment which would significantly alter the characteristics of the waste;

(3) A significant change in the disposal area or point of discharge, including discharging into another drainage area or into a different water body, or to a disposal area different from the existing approved area;

(4) An increase in flow beyond that specified in the issued permit or the application thereto; or

(5) Other circumstances which result in a change in character, amount or location of waste discharge.

(e) The application shall be signed and certified in accordance with the provisions of 40 CFR Section 122.22 as in effect on July 1, 1985.

(f) A permit shall not be issued on the basis of any application which the director has identified as incomplete or otherwise deficient until the director receives sufficient information to correct any deficiency. (Authorized by K.S.A. 1995 Supp. 65-171d; implementing K.S.A. 65-165, 65-166; effective, E-74-32, June 14, 1974; effective May 1, 1975; amended May 1, 1987; amended Sept. 27, 1996.)

28-16-60. Development of draft permit.

(a) Each application and any other relevant facts shall be reviewed by the director to determine one of the following:

(1) A permit shall be issued allowing the discharge.

(2) A permit shall be issued providing for no discharge.

(3) A permit shall not be issued.

(b) If the issuance of a permit is deemed advisable, the proposed permit conditions shall be formulated by the director, including all of the following:

(1) Effluent limitations developed according to the "Kansas implementation procedures: wastewater permitting";

(2) a schedule of compliance, including any necessary interim dates;

(3) any special conditions; and

(4) a monitoring program, if appropriate. (Authorized by K.S.A. 2000 Supp. 65-171d, as amended by L. 2001, Ch. 160, Sec. 15 and L. 2001, Ch. 191, Sec. 15; implementing K.S.A. 2000 Supp. 65-165 and K.S.A. 65-166; effective, E-74-32, June 14, 1974; effective May 1, 1975; amended May 1, 1987; amended Aug. 31, 2001.)

28-16-61. Public notice of permit actions, public comment period, and public hearings. (a) Definitions.

(1) "Clean Water Act (CWA)" means the federal water pollution control act, or federal pollution control act amendments of 1972, P.L. 92-500, as amended by P.L. 95-217, P.L. 95-576, P.L. 96-438, and P.L. 97-117; 33 U.S.C. 1251 et seq.

(2) "Draft permit" means a document prepared under K.A.R. 28-16-60 indicating the director's tentative decision to issue, reissue, deny, modify, revoke and reissue, or terminate a permit.

(3) "Facility or activity" means any NPDES point source as defined in K.A.R. 28-16-57a or any other facility or activity, including land or appurtenances thereto, that is subject to regulation under K.A.R. 28-16-57.

(4) "General permit" means a permit authorizing a category of discharges or activities under the CWA within a geographical area. For NPDES, a general permit means a permit issued under K.A.R. 28-16-150 to 154, inclusive.

(5) "Indian tribe" means any indian tribe having a federally recognized governing body carrying out substantial governmental duties and powers over a defined area.

(6) "Major facilities" are those facilities which are on a mutually agreed list as determined by EPA and the department.

(7) "Permit" means an authorization, license, or equivalent control document issued by the director to implement the requirements of K.A.R. 28-16-57. Permit does not include any document which has not yet been the subject of final agency action, such as a draft permit.

(8) "Resource Conservation and Recovery Act (RCRA)" means the solid waste disposal act of 1965, as amended in 1970, as amended by the resource conservation and recovery act of 1976, P.L. 94-580, as amended by P.L. 95-609, P.L. 98-616, and P.L. 99-499; 42 U.S.C. 6901 et seq.

(9) "UIC" means the underground injection control program under part C of the safe drinking water act, 42 U.S.C. 300f et seq.

(b) Public Notice and Comment Period.

(1) Scope and Timing. Public notice shall be given when a draft permit has been prepared under K.A.R. 28-16-60 and when a hearing has been scheduled under subsection (d) of this regulation.

(A) A public notice shall not be required when a request for permit modification, revocation and reissuance, or termination is denied under K.A.R. 28-16-62. Written notification of that denial shall be given both to the person who requests this change and to the permittee.

(B) Public notices may describe more than one permit or permit action.

(C) Public notice of the preparation of a draft permit shall allow at least 30 days for public comment.

(D) Public notice of a public hearing shall be given at least 30 days before the hearing. Public notice of the hearing may be combined with the public notice of the draft permit.

(2) Methods.

(A) Incorporation. 40 CFR sections 124.8 (a), (b)(1), (2), (4), (5), (6), (7), and (8); 124.10 (c)(1)(i), (ii), (iii), (iv), (v), and (x); (c)(2)(i); (c)(3); and (c)(4); and 124.56, as in effect on July 1, 1991, are adopted by reference.

(B) Each person who is on a mailing list maintained by the department shall also be mailed a copy of the notice. The mailing list shall include:

(i) each person who requests in writing to be placed on the list;

(ii) each person solicited for "area lists" from participants in past permit proceedings in that area; and

(iii) each person who responds to a notice, published in the Kansas Register once a year, of the opportunity to be placed on the list. The mailing list may be updated from time to time by a request from the director for a written indication of continued interest from those listed. The name of any person who fails to respond to such a request may be deleted from the list.

(3) Contents.

(A) Public notice. Each public notice issued under this regulation shall contain the following minimum information:

(i) the name and address of the office processing the permit action for which notice is being given;

(ii) the name and address of the permittee or the permit applicant, and if different, the name of the facility or activity regulated by the permit;

(iii) a brief description of the business con-

ducted at the facility or the activity described in the permit application;

(iv) the name, address, and telephone number of a person from whom interested persons may obtain further information, including copies of the draft permit, fact sheet, and the application; and

(v) a brief description of the comment procedures established by subsections (c) and (d) of this regulation and of the time and place of any hearing that will be held. The notice shall also include a statement of procedures to request a hearing, if a hearing has not already been scheduled, and other procedures by which the public may participate in the final permit decision.

(B) Public notices for hearings. In addition to the general public notice described in paragraph (3)(A) of this subsection, each public notice of a hearing shall contain the following:

(i) reference to the date of any previous public notices relating to the permit at issue; and

(ii) a brief description of the nature and purpose of the hearing, including the applicable rules and procedures.

(C) In addition to the general public notice described in paragraph (3)(A) of this subsection, each person identified in 40 CFR 124.10(c)(1)(i), (ii), (iii), and (iv) shall be mailed a copy of the fact sheet, the permit application, if any, and the draft permit, if any.

(c) Public comments and request for public hearings. During the public comment period provided under subsection (b) of this regulation, any interested person may submit written comments on the draft permit and may request a public hearing, if no hearing has already been scheduled. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised during the hearing. All comments shall be considered in making the final decision and shall be answered as provided in subsection (e) of this regulation.

(d) Public hearings; incorporation. 40 CFR section 124.12(a)(1) and (2), as in effect on July 1, 1991, are adopted by reference.

(e) Response to comments. A response to comments shall be issued at the time that any final permit decision is issued. The response to comments shall be available to the public and shall:

(1) specify which provision, if any, of the draft permit has been changed in the final permit decision, and the reasons for the change; and

(2) briefly describe and respond to all significant comments on the draft permit raised during

the public comment period, or during any hearings. (Authorized by K.S.A. 65-171d; implementing K.S.A. 65-165, and K.S.A. 65-166; effective, E-74-32, June 14, 1974; effective May 1, 1975; amended May 1, 1987; amended Sept. 27, 1993.)

28-16-62. Terms and conditions of permits. (a) Prohibitions. A permit shall not be issued:

(1) By the director when the regional administrator has objected to issuance of the permit under 40 CFR Section 123.44, as in effect on July 1, 1985;

(2) when comments, if any, received from neighboring states, indicate that such discharge will violate the water quality of such states. The neighboring states shall be notified in advance, pursuant to K.A.R. 28-16-61;

(3) when, in the judgment of the secretary of the army, acting through the chief of engineers, anchorage and navigation in or on any of the waters of the United States would be substantially impaired by the discharge;

(4) for the discharge of any radiological, chemical, or biological warfare agent or high level radioactive waste;

(5) for any discharge inconsistent with a plan or plan amendment approved under 33 U.S.C. Section 1288(b); or

(6) to a new source or new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.

(b) Minimum standards of design, construction and maintenance for owners and operators of water pollution control facilities. (1) Each owner or operator of a sewage system, industrial facility, commercial establishment, or agricultural activity discharging or having a potential to discharge sewage to waters of the state shall have approved water pollution control facilities. In approving and issuing permits to each existing or proposed facility, the director shall insure that such facility conforms to published minimum standards of design, construction, and maintenance. In approving and publishing minimum standards of design, construction and maintenance, the director shall insure that such standards are at least as stringent as the requirements of 33 U.S.C. Sections 1311, 1312, 1316, 1317, 1318, and 1343.

(2) Treatment over and above minimum standards shall be required to comply with applicable water quality standards. When minimum stan-

dards do not provide compliance with the applicable water quality standards, a waste-loading allocation shall be prepared to insure that the discharge authorized is consistent with the applicable water quality standards.

(3) Each permit shall also include a schedule of compliance for any facility which is not in full compliance with minimum standards of design, construction, and maintenance and other requirements. If the discharger fails or refuses to comply with the specified schedule of compliance, the regional administrator shall be notified by the director within 30 days of such failure or refusal. If a schedule of compliance exceeds nine months, one or more interim reporting dates shall be required. No more than nine months shall elapse between interim dates contained in a schedule of compliance.

(4) Upon request of the applicant or permittee, a schedule of compliance may be modified by the director if good and valid cause exists for such revision, and if within 30 days following receipt of notice, the regional administrator does not object in writing.

(5) No later than 14 days following each interim date, the discharger shall be required to provide the director with a written notice of progress toward compliance with interim or final permit requirements.

(A) On the last day of the months of February, May, August, and November, a list of all instances, as of 30 days prior to the date of the report, of failure or refusal of a permittee to comply with interim or final requirements or to notify the director of compliance or noncompliance with each interim or final requirement shall be transmitted to the regional administrator by the director. The list shall be available to the public for inspection and copying and shall contain at least the following information with respect to each instance of noncompliance:

(i) The name and address of each noncomplying permittee;

(ii) a short description of each instance of noncompliance;

(iii) a short description of any actions or proposed actions by the permittee or the director to comply or enforce compliance with the interim or final requirements; and

(iv) any details which tend to explain or mitigate an instance of noncompliance with an interim or final requirement.

(B) A permit may be revoked for failure to

comply with any provision of an applicable schedule of compliance in conformance with K.S.A. 65-165. Nothing in this regulation shall be construed to limit the applicability of civil or criminal penalties as provided by law.

(c) Other terms and conditions of permit.

(1) Each permit for a publicly-owned treatment facility shall contain a requirement that the operating agency must notify the director of:

(A) A sewer extension or other means whereby a new introduction of pollutants is discharged to the treatment works; or

(B) A change in the volume or character or pollutants being introduced into such works by a source introducing pollutants into such works at the time the permit was issued.

(2) Each permit shall contain a requirement that the operator of the publicly-owned treatment works insure that each industrial user:

(A) Pays a charge for the user's fair share of the operating and maintenance cost of treatment and a fair share of the federal grant portion of the cost of construction of the treatment plant in accordance with any applicable provisions of the act and the federal grant agreement; and

(B) Complies with applicable toxic and pre-treatment guidelines as contained in the minimum standards of design, construction and maintenance.

(3) Each permit shall contain a condition which states that the discharge of any pollutant not identified and authorized by the permit or the discharge of any pollutant in a manner or quantity which differs from that stated in the application is prohibited.

(4) Each permit shall contain a condition that the discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the permit.

(d) Duration of permits. Each Permit shall be issued for a fixed term not to exceed five years.

(e) Modification or revocation and reissuance of permits. When the director receives any information regarding a permittee, receives a request for modification or revocation and reissuance of a permit, or conducts a review of the permit file, the director may determine whether or not one or more of the causes listed in paragraphs (1) or (2) of this subsection for modification or revocation and reissuance or both exist. If cause exists, the permit may be modified or revoked and reissued accordingly and an updated application may

be requested, if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.

(1) Causes for modification. The following are causes for modification of a permit. However, these causes should not be basis for revocation and reissuance of permits except when the permittee requests or agrees to such an action.

(A) Alterations. Material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance may be the basis for modification of a permit, if those alterations or additions justify application or permit conditions that are different or absent in the existing permit.

(B) Information. If the director has received new information regarding a permittee's facility or activities, the permit may be modified during its term only if the information received was not available at the time of permit issuance and would have justified the application of different permit conditions at the time of issuance.

(C) New regulations. If the standards or regulations upon which a permit was based have been changed by promulgation of amended standards or regulations after the permit was issued, the permit may be modified during its term only when:

(i) The permit condition requested to be modified was based on a promulgated effluent limitations guideline, EPA-approved or promulgated water quality standards, or secondary treatment regulations;

(ii) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based or has approved KDHE action with regard to a water quality standard on which the permit condition was based; and

(iii) a permittee requests modification in accordance with subsection (g) of this regulation within 90 days after notice of action on which the request is based.

(D) Judicial Decisions. Any permit may be modified if:

(i) a court of competent jurisdiction has remanded and stayed EPA-promulgated regulations or effluent limitation guidelines;

(ii) the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based; and

(iii) a request is filed by the permittee in ac-

cordance with subsection (g) of this regulation within 90 days of judicial remand.

(E) Compliance Schedules. Any permit may be modified if the director determines good cause exists for modification of a compliance schedule, including such causes as an act of God, a strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonable available remedy. However, in no case may a compliance schedule be modified to extend beyond a statutory deadline.

(F) Any permit may be modified when the permittee has filed a request for a variance under 33 U.S.C. Sections 301(c), 301(g), 301(h), 301(i), 301(k), or 316(a) or for “fundamentally different factors” within the time specified in 40 CFR Section 122.21 or 125.27(a), as in effect on July 1, 1985.

(G) 33 U.S.C. Section 1317(a) toxics. Any permit may be modified when required to incorporate an applicable 33 U.S.C. Section 1317(a) toxic effluent standard or prohibition.

(H) Reopener. Any permit may be modified when required by “reopener” conditions in a permit that are established for toxic effluent limitations or pretreatment programs.

(I) Net Limits. (i) Incorporation. 40 CFR Section 122.45(h), as in effect on July 1, 1985, is adopted by reference.

(ii) Any permit may be modified upon request of a permittee who qualifies for effluent limitations on a net basis under 40 CFR Section 122.45(h), as in effect on July 1, 1985.

(iii) A permit may be modified when a discharge is no longer eligible for net limitations, as provided in 40 CFR Section 122.45(h), as in effect on July 1, 1985.

(J) Pretreatment. Any permit may be modified as necessary under the compliance schedule for development of a publicly-owned treatment works pretreatment program.

(K) Failure to notify. A permit may be modified upon failure of the department to notify another state whose waters may be affected by a discharge from this state.

(L) Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by technology-based treatment requirements appropriate to the permittee, the permit may be modified.

(M) Notification Level.

(i) Incorporation. 40 CFR Section 122.44(f), as in effect on July 1, 1985, is adopted by reference.

(ii) A permit may be modified to establish a “notification level” as provided in 40 CFR Section 122.44(f), as in effect on July 1, 1985.

(N) Compliance Schedule. A permit may be modified to change a schedule of compliance to reflect time lost during construction of an innovative or alternate facility.

(O) When the permittee’s effluent limitations were imposed under 33 U.S.C. Section 1342(a)(1) and the permittee demonstrates operation and maintenance costs that are totally disproportionate from the operation and maintenance costs considered in the development of a subsequently promulgated effluent limitations guideline, the permit may be modified. However, the limitations shall not be less stringent than the subsequent guideline.

(P) Any permit may be modified to correct technical mistakes, including errors in calculation or mistaken interpretations of law made in determining permit conditions.

(Q) When the discharger has installed the treatment technology considered by the permit writer in setting effluent limitations imposed under 33 U.S.C. Section 1342(a)(1) and has properly operated and maintained the facilities but nevertheless has been unable to achieve those effluent limitations, the permit may be modified. In this case, the limitations in the modified permit may reflect the level of pollutant control actually achieved, but shall not be less stringent than required by a subsequently promulgated effluent limitations guideline.

(2) Causes for modification or revocation and reissuance. Any permit may be modified, or alternatively, may be revoked and reissued when:

(A) Cause exists for termination under subsection (f) of this regulation, and the director determines that modification or revocation and reissuance is appropriate; or

(B) the director has received notification of a proposed transfer of the permit.

(f) Termination of permits.

(1) A permit may be terminated during its term or a permit may be denied for:

(A) Noncompliance by the permittee with any condition of the permit;

(B) the permittee’s failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee’s misrepresentation of any relevant facts at any time;

(C) a determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

(D) a change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit.

(2) The applicable procedures in subsection (g) of this regulation shall be followed for termination of any permit.

(g) Procedures for modifications, revocation and reissuance, or termination of permits.

(1) Any permit may be modified, revoked and reissued, or terminated either at the request of any interested person, including the permittee, or upon the director's initiative. All requests shall be in writing and shall contain facts or reasons supporting the request.

(2) If the director decides that the request is not justified, the requester shall be provided with a brief written response giving a reason for the decision. Denial of requests for modification, revocation and reissuance, or termination shall not be subject to public notice, comment, or hearings. Denials by the director may be informally appealed to the secretary by a letter briefly setting forth the relevant facts. The secretary may direct the director to begin modification, revocation and reissuance, or termination proceedings under paragraph (3) of this subsection. The appeal shall be considered denied if the secretary takes no action on the letter within 60 days after receiving it. This informal appeal shall be a prerequisite to seeking judicial review of agency action in denying a request for modification, revocation and reissuance, or termination.

(3)(A) If the director tentatively decides to modify or revoke and reissue a permit under subsection (e) of this regulation, the director shall prepare a draft permit under K.A.R. 28-16-60 incorporating the proposed changes. The director may request additional information, and in the case of a modified permit, may require the submission of an updated application. A new application for a permit shall be submitted for the reissuance of a revoked permit.

(B) In a permit modification under this regulation, only those conditions to be modified shall be reopened when a new draft permit is prepared. All other aspects of the existing permit shall remain in effect for the duration of the unmodified permit. When a permit is revoked and reissued

under this section, the entire permit shall be reopened just as if the permit had expired and was being reissued. During any revocation and reissuance proceeding, the permittee shall comply with all conditions of the existing permit until a new final permit is reissued.

(4) If the director tentatively decides to terminate a permit under subsection (f) of this regulation, the director shall issue a notice of intent to terminate. A notice of intent to terminate is a type of draft permit which follows the same procedures as any draft permit prepared under K.A.R. 28-16-60.

(h) Transmission to regional administrator of permits. Upon issuance of any permit, a copy of the permit shall be forwarded to the regional administrator by the director.

(i) Reissuance of permits.

(1) At least 180 days prior to expiration of a permit, a permit holder wishing to renew the permit shall file an application, as required by the director.

(2) Permits shall not be reissued unless:

(A) The discharger is in compliance with or has substantially complied with all the terms, conditions, requirements and schedules of compliance contained in the existing permit;

(B) The discharger files an application and other necessary data as required by the director; and

(C) The discharge is consistent with applicable minimum standards of design, construction, and maintenance and water quality standards.

(3) The notice and hearing procedure for reissuance shall be the same as for the issuance of new permits. (Authorized by K.S.A. 65-171d, as amended by L. 1986, Ch. 204, Sec. 3, Sec. 6 and L. 1986, Ch. 201, Sec. 22; implementing K.S.A. 65-165, 65-166, effective, E-74-32, June 14, 1974; effective May 1, 1975, amended May 1, 1987.)

28-16-63. Monitoring. I. An appropriate monitoring program shall be included in all permits. The program may require the discharger to install, use and maintain at his expense, adequate monitoring equipment or methods (including, where appropriate, biological monitoring methods.)

II. Any discharge which 1) is not a minor discharge, 2) the regional administrator requests in writing to be monitored, or 3) contains a toxic pollutant for which an effluent standard has been established shall be monitored by the discharger for

at least the following: (A) Flow (in gallons per day);

(B) Pollutants which are subject to reduction or elimination under the requirements, pollutants which would have a significant impact on the quality of the receiving waters, and pollutants specified by the regional administrator; and

(C) Each effluent flow or pollutant shall be monitored at intervals sufficiently frequent to yield data which reasonably characterize the nature of the discharge. Variable effluent flows and constituent levels shall be monitored at more frequent intervals.

III. Recording. (A) The discharger shall record the results of all monitoring and shall include for all samples: (1) The date, exact place, time of sampling, and who took the sample;

(2) The dates analyses were performed and who performed the analyses;

(3) Analytical techniques/methods used; and

(4) The results of such analyses.

(B) The discharger shall be required to retain for a minimum of three years any records of monitoring activities and results, including all original strip chart recording and calibration and maintenance records. The period of retention shall be extended during the course of any unresolved administrative enforcement action or litigation regarding the discharge of pollutants by the discharger or when ordered by the director.

IV. Reporting. (A) Monitoring results shall be reported on forms required by the director and forwarded to the director at specified time periods of not less than once per year.

(B) The director shall require the use of monitoring, recording, and reporting procedures which at a minimum are at least as stringent as any national monitoring, recording, and reporting requirements specified by the administrator in regulations issued pursuant to the act. (Authorized by K.S.A. 1974 Supp. 65-165, 65-166, 65-171d; effective, E-74-32, June 14, 1974; effective May 1, 1975.)

28-16-64. Reserved.

28-16-65. (Authorized by K.S.A. 12-3710 et seq.; effective, E-74-33, June 21, 1974; effective, E-76-20, May 1, 1975; effective May 1, 1976; revoked May 10, 1996.)

28-16-66. Reserved.

28-16-67. (Authorized by K.S.A. 12-3711;

effective, E-78-4, Dec. 1, 1977; effective May 1, 1978; revoked May 10, 1996.)

**ESTABLISHMENT AND ADMINISTRATION
OF CRITICAL WATER QUALITY
MANAGEMENT AREAS**

28-16-68. Reserved.

28-16-69. Definitions. (a) Agricultural pollutants means sediments, organic material or microorganisms from cultivated fields, pastures or grazing land; pesticides; runoff from feedlots or other animal holding areas; fertilizers; or minerals contained in irrigation return flow.

(b) Critical water quality management area means a watershed, or a portion of a watershed, in which application of minimum state or national wastewater and water quality management practices and procedures cannot be reasonably expected to result in attainment of water quality goals, attainment of water quality standards, protection of resources of the state, prevention of excessive sediment deposition in stream beds, lakes or reservoirs, or prevention of destruction of fishery habitat; or an area in which additional treatment and control of pollutants can result in additional cost effective benefits.

(c) Critical area water quality management plan means a plan providing for the control of all pollutant sources within the critical area.

(d) Endangered species means those species of wildlife indigenous to the state whose existence is in immediate jeopardy due to a combination of natural or man-made factors.

(e) Kansas water quality management plan means the plan approved by senate concurrent resolution 1640 dated April 2, 1979.

(f) Rural clean water program means a program for the control of wastes from agricultural sources for improved water quality, promulgated in conformity with Section 208(j) (1)-(9) of the federal water pollution control act as amended, 33 U.S.C. 166, *et seq.*

(g) Rural clean water program coordinating committee means the state administrative committee, established pursuant to U.S. department of agriculture regulations, to administer the rural clean water program.

(h) Threatened species means those species of wildlife indigenous to the state whose existence may become endangered by continued deterioration due to natural or man-made forces.

(i) Water quality standards means standards

found in K.A.R. 28-16-28 and 28a. (Authorized by K.S.A. 65-171a, 65-171d, 65-3301, 65-3303, 65-3304, 65-3305; effective May 1, 1981.)

28-16-70. Designation of critical water quality management area. (a) Watersheds or portions of watersheds shall be considered by the secretary for designation as critical water quality management areas because of pollutant sources which cause, or may reasonably be expected to cause, damages to resources of the state; public nuisance or health hazards; destruction of fishery habitat; excessive deposition of sediments on river bottoms, lakes or reservoirs; additional risk to threatened or endangered fish or wildlife; or violation of water quality standards.

(b) The secretary shall initiate such action on the secretary's initiative, at the request of other state or federal agencies, local governments, or through public initiative.

(c) The secretary shall give public notice of intent to consider an area for designation as a critical water quality management area. The secretary shall consider all responses to the public notice in determining whether to proceed with the evaluation of the candidate area.

(d) Any person, unit of local government, or state or federal agency proposing that an area be designated as a critical water quality management area shall submit a proposal to the secretary incorporating the following information: a map showing the boundaries of the proposed area; a brief discussion of the nature of the damages that are occurring or which may reasonably be expected to occur; a brief discussion of those pollutant sources believed to be responsible for the observed or potential damages; a brief discussion of the public support for, or likely objection to, a critical water quality management designation; and the name, title, and authority of the individual or agency submitting the proposal.

(e) Prior to the designation of a critical water quality management area the secretary shall:

(1) Evaluate all pollutant sources and the extent to which these pollutant sources are or may be reasonably expected to cause violation of water quality standards, damages to resources of the state, nuisance conditions, hazards to the public health, excessive sedimentation, destruction of fisheries habitat, or additional risk to threatened or endangered fish or wildlife species.

(2) Evaluate all data and consider public comments in determining the technical and economic

feasibility of simultaneous control of all pollutant sources. When determining the technical and economic feasibility of agricultural pollutant reduction, the secretary shall consult with the state conservation commission, the affected conservation district(s), and other knowledgeable sources. In conducting the evaluation, the secretary may invite and give consideration to comments from individuals, interest groups, federal agencies, other state agencies, and affected local government.

(f) If the secretary concludes, as a result of the evaluations, that the establishment of a critical water quality management area is necessary and pollutant control is technically and economically feasible, the secretary shall prepare a proposed management plan setting forth an implementation schedule for control of each pollutant source, an analysis of the costs and benefits of the proposed management plan, and the boundaries of the proposed area.

(g) The secretary shall give public notice of the availability of the proposed management plan, make copies available for review, and hold a public hearing on the proposed designation.

(h) The secretary, on the basis of the evaluation and public hearing, may designate an area as a critical water quality management area, and give public notice of the designation through publication in a newspaper having general distribution in the county or counties in which the designated area is located. (Authorized by K.S.A. 65-171a, 65-171d, 65-3301, 65-3303, 65-3304, 65-3305; effective May 1, 1981.)

28-16-71. Administration of critical water quality management area. (a) The secretary shall establish a local advisory committee to assist in the administration of each designated area. If pollutant reduction in the area involves agricultural pollutant reduction, the area shall be submitted as a candidate project to the state rural clean water program coordinating committee for funding under the rural clean water program.

(b) All permits issued by the secretary for the control of pollutants, the establishment of waste disposal sites, the construction or expansion of water supply or sewerage systems or the establishment of sanitation zones or other measures necessary for the control of pollutants shall be consistent with the adopted plan.

(c) The secretary shall prepare an annual report for each designated area and shall make copies of the report available to residents of the area.

The report shall evaluate the effectiveness of control measures, including the approximate costs, effects on water quality and resources of the state, and a brief summary of any public input related to administration of the area.

(d) The secretary may terminate designation of any designated critical water quality management area upon determination that such designation is not needed for protection of water resources, or that the controls are not technically or economically practical, or there is substantial public opposition. The secretary shall give public notice of intent and termination shall not be effective until sixty (60) days after such public notice. (Authorized by K.S.A. 65-171a, 65-171d, 65-3301, 65-3303, 65-3304, 65-3305; effective May 1, 1981.)

28-16-72 to 28-16-75. Reserved.

**DEVELOPMENT OF COUNTYWIDE
WASTEWATER MANAGEMENT PLANS**

28-16-76. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3303, 65-3305, 65-3308; effective May 1, 1980; revoked March 23, 2001.)

28-16-77. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3308, 65-3309; effective May 1, 1980; revoked March 23, 2001.)

28-16-78. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3308, 65-3309, 65-3310; effective May 1, 1980; revoked March 23, 2001.)

28-16-79. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3308, 65-3309, 65-3310; effective May 1, 1980; revoked March 23, 2001.)

28-16-80. Elements of plan. (a) Each plan shall incorporate the following elements:

(1) The projected population development of the county for a twenty-five (25) year period beginning June 30, 1980, with subprojections for each five (5) year increment;

(2) Description of each existing sewerage system including treatment plants, major pumping stations, interceptors, and areas of combined sewers, including the age, size and capacity and ownership of each major unit;

(3) An evaluation of the projected ability of existing and projected sewerage systems to meet water quality standards (K.A.R. 28-16-28 and K.A.R. 28-16-28a);

(4) The schedule whereby new sewerage systems will be constructed or existing sewerage sys-

tems expanded to provide service for new areas. The schedule shall be such that:

(A) no new permanent treatment facilities will be projected in areas where sewer systems exist unless there is reasonable evidence that the waste to be treated is incompatible or that the existing system would be overloaded;

(B) temporary wastewater treatment facilities may be provided in areas without sewer service, and in which there is a reasonable potential for the construction of new interceptors;

(C) new treatment facilities will be provided in areas where no treatment facilities exist and interceptors are not within a reasonable distance or are not economically feasible;

(D) simplicity, reliability and energy efficiency will be emphasized in the design of treatment systems;

(E) the proliferation of very small waste treatment systems will be discouraged in metropolitan areas; and,

(F) agricultural and municipal waste disposal irrigation systems will be encouraged where practicable and will take into account the maintenance of minimum flow levels in receiving waters and established water rights;

(5) A description of each community water delivery system, including sources of supply, major storage facilities, major lines, pumping stations, and treatment plants;

(6) The schedule whereby new water supply systems will be constructed or existing systems expanded to provide service for those areas in which additional population development is projected;

(7) A description of the mechanisms to be used to coordinate the provision of water delivery and sewerage services in those areas in which further population growth or industrial development is projected;

(8) A land use map indicating those areas in which on-site residential wastewater treatment facilities may be used, a description of the permit and inspection system used to regulate such developments, and the conditions imposed to assure satisfactory operation over a reasonable period of time;

(9) Copies of agreements between units of local government necessary to assure the orderly construction of new or extended sewerage or water delivery facilities;

(10) A land use map showing all significant waterways, flood plains and floodways, parks, lakes and reservoirs, recreational areas, sanitation

zones, and critical water quality management areas and clearly establishing the relationship between these land uses and existing and projected water delivery and sewerage systems;

(11) Any predicted community developments which will have a major impact on the demands for water supply or sewerage service;

(12) The location of existing industrial waste treatment facilities, an assessment of potential waste loads and the relationship of these loads to those imposed by municipal discharges;

(13) The estimated costs of projected improvements for sewerage system extensions during the first five (5) year period of the twenty-five (25) year plan;

(14) An evaluation of the extent to which wastewater may be used for municipal or agricultural irrigation and the extent to which municipal wastewater may be reclaimed for industrial use;

(15) An evaluation of the extent to which urban stormwater runoff may contribute to violation of water quality standards, (K.A.R. 28-16-28 and K.A.R. 28-16-28a);

(16) Description and evaluation of current and projected sludge disposal practices and facilities;

(17) Identification of any relationships between the projected sewerage plans and county air quality maintenance plans; and

(18) A plan and schedule for review and updating of the plan at five (5) year intervals.

(b) The plan shall be based, insofar as practicable on available studies or reports and which may be incorporated by reference.

(c) Each plan shall, as appropriate, identify any water delivery or sewerage problems, the solution of which requires coordination with an adjacent county, and the mechanisms to be used to achieve this coordination.

(d) The committee shall hold one (1) or more public hearings on the plan and shall submit to the secretary a report of such hearings at the time it files the plan. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3308, 65-3309, 65-3310; effective May 1, 1980.)

28-16-81. Administration of approved plan. (a) Any plan approved by the secretary will become a part of the Kansas water quality management plan. Applicants for effluent permits will be subject to section 208(e) of the federal water pollution control act, 33 U.S.C. 466, *et seq.*, and applicants for municipal construction grants will

be subject to section 208(d) of the federal water pollution control act as amended.

(b) Permits issued by the secretary for the operation of sewerage facilities will be consistent with the plan.

(c) Permits issued by the secretary for new or extended sewerage systems will be consistent with the plan.

(d) Comments by the secretary on federally-funded projects pursuant to bureau of budget circular A-95 will be consistent with the plan.

(e) Comments made by the secretary on projects proposed by other state agencies will be consistent with the plan. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3303, 65-3304, 65-3308, 65-3310; effective May 1, 1980.)

28-16-82. (Authorized by K.S.A. 65-3301, K.S.A. 1979 Supp. 65-3303, 65-3304, 65-3308, 65-3310, 65-3313; effective May 1, 1980; revoked March 23, 2001.)

PRETREATMENT

28-16-83. Entities regulated. The provisions of K.A.R. 28-16-84 to 28-16-98, inclusive, and any amendments to those regulations, shall apply to:

(a) pollutants from nondomestic sources which are subject to one or more pretreatment standards and which are indirectly discharged, or are otherwise introduced by any means, into any publicly owned treatment works (POTW);

(b) any POTW which receives wastewater from sources subject to one or more pretreatment standards; and

(c) any new or existing source which is subject to one or more pretreatment standards. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-84. Objectives of general pretreatment regulations. 40 CFR § 403.2, as in effect on July 1, 1986, is adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-85. Definitions. 40 CFR § 403.3, as in effect on July 1, 1986, is adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-86. Local laws not superceded. The provisions of K.A.R. 28-16-83 to 28-16-98,

inclusive, shall not supercede any pretreatment requirements, including any standards or prohibitions, established by any local law as long as the local requirements are not less stringent than any set forth in the national pretreatment standards or other requirements or prohibitions established by the state or federal government. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-87. National pretreatment standards; prohibited discharges. Subsections (a) to (e), inclusive, of 40 CFR § 403.5, as in effect on July 1, 1986, are adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-88. National pretreatment standards; categorical standard. 40 CFR § 403.6, as in effect on July 1, 1986, is adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-89. Revision of categorical pretreatment standards to reflect POTW removal of pollutants. (a) 40 CFR § 403.7, as in effect on July 1, 1986, is adopted by reference, except that in lieu of § 403.7(b)(3) the following shall apply: “(3) The POTW shall analyze the samples for pollutants in accordance with the analytical techniques prescribed in 40 CFR part 136, as in effect on July 1, 1986. Where 40 CFR part 136 does not contain sampling and analytical techniques for the pollutant in question, or where the secretary determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or other appropriate sampling and analytical procedures approved by the secretary. Alternate sampling and analytical techniques suggested by the POTW or other persons will be considered by the secretary.”

(b) 40 CFR part 136, as in effect on July 1, 1986, is adopted by reference (see 49 FR 43234, 50 FR 690 and 51 FR 23692). (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1986; amended May 1, 1987.)

28-16-90. POTW pretreatment programs, developed by POTW. 40 CFR § 403.8, as in effect on July 1, 1986, is adopted by reference, except in lieu of paragraph (f)(1)(vii) the fol-

lowing shall apply: “(vii) Comply with the confidentiality requirements of the Kansas open records act.” (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-91. POTW pretreatment programs. Any municipality (POTW) with a Kansas water pollution control permit may be required to develop a local pretreatment program. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-92. POTW pretreatment programs or authorization to revise pretreatment standards; submission for approval. 40 CFR § 403.9, as in effect on July 1, 1986, is adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-93. Approval procedures for POTW pretreatment programs and POTW revision of categorical pretreatment standards. 40 CFR § 403.11, as in effect on July 1, 1986, is adopted by reference. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-94. Reporting requirements for POTW's and industrial users. (a) 40 CFR § 403.12, as in effect on July 1, 1986, is adopted by reference, except that:

(1) in lieu of § 403.12(b)(5)(vi) the following shall apply: “(vi) Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR part 136, as in effect on July 1, 1986. Where 40 CFR part 136 does not contain sampling and analytical techniques for the pollutant in question, or where the secretary determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods or other appropriate sampling and analytical procedures approved by the secretary. Alternate sampling and analytical techniques suggested by the POTW or other persons will be considered by the secretary.”

(2) in lieu of § 403.12(g) the following shall apply: “(g) Monitoring and analysis to demonstrate continued compliance. The reports required in paragraphs (b)(5), (d), and (e) of this section shall contain the results of sampling and analysis of the discharge, including the flow and the nature and

concentration, or production and mass where requested by the control authority, of pollutants contained therein which are limited by the applicable pretreatment standards. The frequency of monitoring shall be as prescribed in the applicable pretreatment standard. All analyses shall be performed in accordance with 40 CFR part 136, as in effect on July 1, 1986. Where 40 CFR part 136 does not include sampling or analytical techniques for the pollutants in question, or where the secretary determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or other sampling and analytical procedures approved by the secretary. Alternate sampling and analytical techniques suggested by the POTW or persons will be considered by the secretary."

(3) In lieu of § 403.12(k) the following shall apply: "(k) Penalties for providing false information. Any person who willfully provides false information on any report required by subsections (b), (d), (e), or (h), of 40 CFR § 403.12 shall be subject to the penalties imposed under K.S.A. 65-170c, K.S.A. 65-170d and K.S.A. 1985 Supp. 21-3805, and any amendments thereto."

(b) 40 CFR part 136, as in effect on July 1, 1986, is adopted by reference (see 49 FR 43234, 50 FR 690, and 51 FR 23692). (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1986; amended May 1, 1987.)

28-16-95. Variances from categorical pretreatment standards for fundamentally different factors. 40 CFR § 403.13, as in effect on July 1, 1986, is adopted by reference, except that: (a) in lieu of § 403.13(b), the following shall apply: "(b) A fundamentally different factors variance may be requested under this section by any interested person believing that factors relating to an industrial user are fundamentally different from the factors considered during development of a categorical pretreatment standard applicable to that user and that the existence of those factors justifies a different discharge limit than specified in the applicable categorical pretreatment standard. Such a variance request may be initiated by the secretary. A fundamentally different factors variance is not available for any toxic pollutant controlled in a categorical pretreatment standard; and"

(b) in lieu of § 403.13(c)(1)(ii), the following

shall apply: "(ii) Factors relating to the discharge controlled by the categorical pretreatment standard are fundamentally different from the factors considered in establishing the standards; and." (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1986; amended May 1, 1987.)

28-16-96. Confidentiality of information. Any information submitted to the department of health and environment shall be subject to disclosure or nondisclosure as provided in the Kansas open records act. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-97. Net/Gross calculations. 40 CFR § 403.15, as in effect on July 1, 1986, is adopted by reference, except that each reference to the enforcement division director, regional enforcement officer, water management division director or EPA shall be deemed to refer to the secretary. Nothing in this regulation shall relieve any person of the duty to obtain approval from the U.S. environmental protection agency. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1986; amended May 1, 1987.)

28-16-98. Upset provisions. 40 CFR § 403.16, as in effect on July 1, 1986, is adopted by reference, except that each reference to the agency shall be deemed to refer to the Kansas department of health and environment. (Authorized by and implementing K.S.A. 65-171d; effective May 1, 1985; amended May 1, 1987.)

28-16-99 to 28-16-109. Reserved.

28-16-110. Definitions. For the purposes of the regulations in this article, the following words, terms and phrases are defined as follows:

(a) "Best practicable waste treatment technology (BPWTT)" means a cost-effective technology that can treat wastewater, including combined sewer overflows and nonexcessive infiltration and inflow, to meet the applicable provisions of Kansas water supply and sewage statutes, K.S.A. 65-161 to 65-171x; water pollution control statutes, K.S.A. 65-3301 to 65-3313; and the federal clean water act as amended on or before January 1, 1989, 33 USC 1251 *et seq.*

(b) "Department" means the Kansas department of health and environment.

(c) "Equivalency" means that portion of the

Kansas water pollution control revolving fund which was directly made available by the federal government.

(d) "Equivalency project" means that portion of the project cost which is funded from the equivalency portion of the Kansas water pollution control revolving fund.

(e) "Facilities planning" means the necessary plans and studies directly related to the project financed from the Kansas water pollution control revolving fund. The content of a facilities plan shall be as described in the federal register 40 CFR 35.2030(b), as in effect on January 1, 1989.

(f) "Infiltration" means water other than sewage that enters a sewerage system from the ground through defective pipes, pipe joints, connections, or manholes.

(g) "Excessive infiltration" means the quantity of flow which is more than 120 gallons per capita per day or the quantity of infiltration which could be economically and effectively eliminated from a sewer system as determined in a cost-effectiveness analysis. Flow rates more than 120 gallons per capita per day when justified by water use records are not considered to be excessive infiltration.

(h) "Inflow" means water other than sewage that enters a sewerage system. Inflow does not include infiltration.

(i) "Excessive inflow" means a rainfall-induced flow rate in excess of 275 gallons per capita per day.

(j) "Loan applicant" means any county, city, sewer district, other public agency, or any combination thereof, created by or pursuant to Kansas statutes, filing an application for a loan pursuant to the Kansas water pollution control fund act of 1988.

(k) "Loan agreement" means an executed contract between a loan recipient and the secretary confirming the purpose of the loan, the amount and terms of the loan, the schedule of loan payments and repayments and any other agreed upon conditions set forth by the secretary.

(l) "Minority business enterprise" means a business certified as a minority business enterprise by a state or federal agency based on the authority of state or federal statutes.

(m) "Project" means the scope of work for which a loan is awarded.

(n) "Secretary" means the secretary of Kansas department of health and environment.

(o) "Sewerage" means the removal and treat-

ment of surface water, sewage and other wastewater by sewers, a system of sewers, wastewater treatment processes or any other means such as recycling and reclamation.

(p) "Value engineering" means a cost control technique which uses a systematic approach to identify unnecessarily high costs in a project without sacrificing the reliability or efficiency of the project.

(q) "Women's business enterprise" means a business certified as a women's business enterprise by a state or federal agency based on the authority of state or federal statutes.

(r) "Wastewater treatment works" means any device, or system for the storage, treatment, recycling, and reclamation of sewage. These include:

(1) intercepting sewers, outfall sewers, sewage collection systems, pumping stations, facilities for sewage treatment and disposal of residues resulting from treatment, power and other equipment, their appurtenances, extensions, improvements, remodeling, additions and alterations thereof; and

(2) any works, including site acquisition of the land, that will be an integral part of the treatment process or are used for ultimate disposal of residues resulting from treatment. (Authorized by and implementing K.S.A. 1988 Supp. 65-3323; effective May 29, 1989.)

28-16-111. Reserved.

28-16-112. Fund use eligibility. (a) The fund shall be used only to finance all or any part of the following activities:

(1) loans to loan applicants for the planning, design, and construction of publicly-owned wastewater treatment works; and

(2) loans to loan applicants with taxing authority for the implementation of nonpoint source pollution control management programs developed in conformance with section 319 of the federal clean water act as amended on or before January 1, 1989, 33 USC 1251 *et seq.*

(b) Each project eligible to receive loans shall appear on the project priority list prepared by the department. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-113. Interest rate. Each loan shall bear interest for the entire life of the loan at a rate set by the secretary. The secretary may also set fees for servicing the loans. The interest rate to-

gether with the servicing fee shall be an amount equal to sixty percent of the previous three months' average "bond buyers 20 bond index" as published on the first Monday of each week of the preceding three months. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3326; effective May 29, 1989.)

28-16-114. Repayment of loans. (a) All principal and interest shall be repaid in accordance with the terms and conditions of the executed loan agreement. Principal and interest payments shall begin not later than two years after receipt of the first loan installment and in no case later than one year following the completion of the project. Repayment of the loan shall not exceed a 20-year repayment period as agreed upon in the loan agreement. Project completion is defined as initiation of operation or capability to initiate operation.

(b) Prepayment of principal in whole or part may be made in accordance with the terms and conditions of the executed loan agreement. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-115. Dedicated loan repayment source. (a) Each loan recipient shall adopt one or more dedicated sources of revenue for repayment of the loan including principal and interest. The dedicated sources of revenue may be in the form of user charges, ad valorem taxes, special tax assessments, another permanent source of revenue or some combination of these sources. Each dedicated source of revenue shall be legally available to the loan recipient over the life of the loan repayment obligation and pledged to the repayment of the loan. Each dedicated source of revenue shall be approved by the secretary.

(b) Each loan recipient shall conduct a revenue source review every fifth year following the date of the loan agreement during the entire life of the loan repayment obligation and shall implement the new revenue rates as approved by the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3326 and 65-3327; effective May 29, 1989.)

28-16-116. Failure to repay loan on schedule. Upon failure of a loan recipient to pay one or more installments of the loan repayment on schedule, the governing body of the loan recipient shall be consulted by the secretary, and

thereafter the governing body shall adopt charges, as set by the secretary, to be levied against users of the project. These charges shall remain in effect until the full amount of the loan, including principal and interest, has been repaid. The governing body of each loan recipient shall collect any charges established by the secretary or required by the secretary and shall expeditiously forward the collected moneys to the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3327; effective May 29, 1989.)

28-16-117. Double benefits. (a) Projects receiving construction grants under the federal clean water act shall not be eligible to receive loans under the Kansas water pollution control revolving fund act for the nonfederal shares of the projects costs.

(b) Loans shall be made only for the publicly-owned portion of sewerage projects.

(c) If a project receives a loan for planning, preparation of design and construction documents or both, and subsequently receives a federal grant allowance for the same purposes, the loan recipient shall repay the loan to the extent of the allowance received by not later than 30 days from the receipt of the allowance. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-118. Project eligibility. (a) In order to receive a loan, each sewerage facility equivalency project shall comply or be consistent with:

(1) The best practicable waste treatment technology requirements defined in K.A.R. 28-16-110(a);

(2) The facilities planning process defined in K.A.R. 28-16-110(e);

(3) The type of projects described in K.A.R. 28-16-119;

(4) The alternative ultimate waste disposal procedure described in K.A.R. 28-16-120;

(5) The infiltration and inflow requirements described in K.A.R. 28-16-121;

(6) The alternative and innovative treatment provisions described in K.A.R. 28-16-122;

(7) The open space recreation requirement described in K.A.R. 28-16-123;

(8) The capital improvement plan described in K.A.R. 28-16-124; and

(9) The water quality management plan described in K.A.R. 28-16-125.

(b) In order to receive a loan, each nonpoint

source pollution control equivalency project shall comply or be consistent with the nonpoint source pollution control management plan described in K.A.R. 28-16-126. (Authorized by and implementing K.S.A. 1988 Supp. 65-3323; effective May 29, 1989.)

28-16-119. Eligible project types. (a) An equivalency loan may be granted for:

(1) Projects providing secondary treatment, any part of secondary treatment or any cost-effective alternative to secondary treatment;

(2) Projects providing a treatment process or any part of a treatment process which is more stringent than secondary treatment or cost-effective alternatives;

(3) Other wastewater treatment works;

(4) New interceptors and their appurtenances;

(5) Excessive infiltration or inflow correction projects; or

(6) Other sewerage facility projects, and nonpoint source pollution control management plan implementation projects, and groundwater quality protection projects. These types of projects shall not exceed 20% of equivalency funds, and require the specific designation of the governor.

(b) Any sewerage project or nonpoint source pollution control project may receive a loan from the nonequivalency portion of the Kansas water pollution control revolving fund upon approval of the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and K.S.A. 1988 Supp. 65-3324; effective May 29, 1989.)

28-16-120. Alternative ultimate disposal. Each loan applicant for a sewerage facility project shall evaluate alternative methods and technologies for the reuse or ultimate disposal of treated wastewater and residue material resulting from the waste treatment process. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-121. Infiltration and inflow. Each loan applicant for a sewerage facility project shall demonstrate that: (a) the existing sewage collection systems related to the proposed project are not subject to excessive infiltration or inflow; or

(b) the loan applicant has been implementing an effective ongoing infiltration and inflow reduction program for those sewage collection systems.

(Authorized by K.S.A. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-122. Alternative and innovative treatment. Each loan applicant for a wastewater treatment project shall demonstrate the consideration of cost effective alternative and innovative wastewater treatment processes and techniques during the planning, selection and design of the project. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-123. Open space recreation. Each loan applicant shall analyze and document the potential open space and recreation opportunities associated with the project. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-124. Capital improvement plan. Each loan applicant for a sewerage facility project shall submit to the secretary, with the loan application, a capital improvement financing plan for the applicant's projected sewerage facility needs. The plans shall cover not less than a five-year period and shall be approved by the governing body of the entity. The capital improvement financing plan shall be reviewed and kept current by the governing body during the entire life of the loan repayment obligation. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-125. Water quality management plan. Each sewerage facility project eligible for a loan shall be consistent with the applicable water quality management plan, the county-wide wastewater management plan or both, and the loan applicant shall be a designated wastewater management agency within the management plan. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-126. Nonpoint source pollution control management plan. Each nonpoint pollution control or groundwater quality protection project shall be consistent with applicable nonpoint pollution source control management planning approved by the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-127. Sewer use ordinance. Each

loan applicant for a sewerage facility project shall develop, and subsequent to the secretary's approval, adopt a sewer use ordinance or other legally binding document to protect the integrity of the entire wastewater works system by: (a) requiring the exclusion of excessive infiltration and inflows from the treatment works;

(b) prohibiting toxic concentrations of toxic materials in wastewater introduced into the treatment works; and

(c) prohibiting other pollutants in amounts or concentrations that:

(1) endanger public safety or the physical integrity of the treatment works; or

(2) cause violation of effluent or water quality limitations or cause residue or sludge processing or disposal problems. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-128. User charge system. Each loan applicant for a sewerage facility project shall develop, and subsequent to the secretary's review and approval, adopt a user charge system which shall produce adequate revenues for operation and maintenance of the entire wastewater works, including minor replacement. The user charge system shall be based on either actual use of the wastewater works, ad valorem taxes or a combination of the two. An ad valorem tax may only be used if that form of dedicated user charge had been in place prior to the initiation of the proposed project. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322 and 65-3326; effective May 29, 1989.)

28-16-129. Value engineering. Each loan recipient for a sewerage project shall conduct value engineering during the design phase of the project if the total estimated project cost exceeds \$10 million. The value engineering recommendations shall be implemented to the maximum extent possible as approved by the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-130. Project certification. Each loan recipient shall certify to the secretary whether the project meets the project's performance standards on the date one year after the initiation of operations of the project. The loan recipient shall be responsible for assuring timely correction and compliance, including recertifica-

tion in case the initial certification was a negative declaration. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-131. Procurement. Each loan recipient shall follow applicable state procurement laws and regulations and procedures established by the secretary. The approval of the secretary is required prior to procurement. (Authorized by and implementing K.S.A. 1988 Supp. 65-3323; effective May 29, 1989.)

28-16-132. Fair labor standards. Bidding documents for each wastewater treatment works equivalency project shall include the prevailing wage rates established for the locality by the U.S. department of labor under the federal Davis-Bacon act. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-133. Small minority and women's business enterprises. Each loan recipient for a wastewater treatment works equivalency project shall assure that affirmative steps were taken to utilize small, minority and women's businesses as sources of supplies, construction and services. Affirmative steps shall be documented and submitted to the department. Project-specific goals may be set by the secretary. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-134. Projects documents. (a) Each loan applicant for a sewerage facility projects shall submit, for the secretary's review and approval, the following documents:

(1) A completed loan application on application forms furnished by the department;

(2) A facilities plan that establishes the need for the project;

(3) Complete design plans, specifications, and construction bidding documents, including detailed cost estimates necessary for competitive bidding, and projected construction and payment schedules;

(4) A plan of operation, including an overall project completion schedule, annual operating cost projections for a minimum of five years, a description of the financial management system, and projected revenues to operate and maintain the entire facility. Revenue projections shall also include the loan repayment obligations; and

(5) A facility operations manual, which shall be submitted before 90% of the project is completed.

(b) Each loan applicant for a nonpoint source pollution control management plan implementation or groundwater quality protection project shall submit, for the secretary's review and approval, the following documents:

(1) A completed loan application on application forms furnished by the department;

(2) Planning documents or any assessment which establishes the need for the project;

(3) Documents needed to plan the construction of the project.

(4) A plan of operation and maintenance to assure project performance for the design life of the project; and

(5) A binding assurance that adequate financial resources will be available for operation and maintenance of the project during the life of the project. (Authorized by and implementing K.S.A. 1988 Supp. 65-3323; effective May 29, 1989.)

28-16-135. Financial capability. As part of the loan application, each loan applicant shall demonstrate and certify to the secretary that the applicant has the financial capability to repay the loan and to cover the costs of operation and maintenance of the entire system of which the proposed project is an integral part. The financial assessment shall cover the life of the loan obligations and consider, as a minimum, changes in economic and population growth, existing in debt obligations, revenues, project costs, and effects on user charge rates. (Authorized by and implementing K.S.A. 1988 Supp. 65-3323; effective May 29, 1989.)

28-16-136. Public participation. Each loan recipient shall conduct a minimum of one public meeting and one public hearing prior to execution of the loan agreement.

(a) A public meeting shall be conducted during the preparation of the facilities plan, nonpoint source pollution control management plan or groundwater quality protection plan to discuss project alternatives. Public notice shall be given not less than 15 days before the public meeting.

(b) Prior to the adoption by the governing body and submission to the secretary for approval of the facilities plan, nonpoint source pollution control management plan or groundwater quality protection plan, a public hearing shall be conducted. Public notice shall be given not less than 30 days before the public hearing. (Authorized by K.S.A.

1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-137. Environmental review. (a) The Kansas environmental review procedure for the Kansas water pollution control revolving loan program, dated February, 1989 is adopted by reference as the required environmental procedure for an equivalency project.

(b) For an equivalency project, 40 CFR, 6.508(a), 6.511(b) and 6.512 as in effect on July 1, 1988, are adopted by reference.

(c) Those members of the public who participate in the environmental review process shall have the right to appeal the decisions made within that process. All such appeals shall be conducted pursuant to the Kansas administrative procedures act and the act for judicial review set forth in K.S.A. 1988 Supp. 77-501 et seq. and K.S.A. 77-601 et seq., respectively.

(d) When used in any provision adopted from 40 CFR Part 6, references to "EPA" shall be replaced with the Kansas department of health and environment; "grant" shall be replaced with loan agreement; "grantee" shall be replaced with applicant. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989; amended, T-28-10-17-89, Oct. 17, 1989; amended Dec. 26, 1989.)

28-16-138. Project accounts. Each loan recipient shall maintain project accounts in accordance with or similar to generally accepted government accounting standards defined in the 1988 edition of the Government Accounting, Auditing, and Financial Reporting manual issued by the Government Finance Officers Association. (Authorized by K.S.A. 1988 Supp. 65-3323; implementing K.S.A. 1988 Supp. 65-3322; effective May 29, 1989.)

28-16-150. Scope. The provisions of K.A.R. 28-16-150 through 28-16-154, inclusive and any amendments to those regulations, shall apply to the issuance of each general permit for water pollution control. (Authorized by K.S.A. 65-165; implementing K.S.A. 65-165 and K.S.A. 65-171d; effective Sept. 27, 1993.)

28-16-151. Definitions. 40 CFR 122.2 as in effect on July 1, 1991 is adopted by reference. (Authorized by K.S.A. 65-165; implementing K.S.A. 65-165 and K.S.A. 65-171d; effective Sept. 27, 1993.)

28-16-152. Coverage. 40 CFR 122.28(a) as in effect July 1, 1991, as amended at 57 FR 11412, April 2, 1992 is adopted by reference. (Authorized by K.S.A. 65-165; implementing K.S.A. 65-165 and K.S.A. 65-171d; effective Sept. 27, 1993.)

28-16-153. Administration. 40 CFR 122.28(b)(1), (2), and (3)(i), (iii), (iv), and (v), as in effect on July 1, 1991, as amended at 57 FR 11412, April 2, 1992 are adopted by reference, with the following modifications or exceptions. (a) The provisions of 40 CFR 122.28(b)(1) shall be modified as follows: “(1) In general. General permits may be issued, modified, revoked and reissued, or terminated in accordance with K.A.R. 28-16-59 through 28-16-62 inclusive, and K.A.R. 28-16-154.”

(b) The provisions of 40 CFR 122.28(b)(2)(i) shall be modified as follows: “(i) Except as provided in paragraphs (b)(2)(v) and (b)(2)(vi) of this section, each discharger or treatment works treating domestic sewage seeking coverage under a general permit shall submit to the director a written notice of intent to be covered by the general permit. Any discharger or treatment works treating domestic sewage who fails to submit a notice of intent in accordance with the terms of the permit shall not be authorized to discharge, (or in the case of sludge disposal permit, to engage in a sludge use or disposal practice), under the terms of the general permit unless the general permit, in accordance with paragraph (b)(2)(v) of this section, contains a provision that a notice of intent is not required or the director notifies a discharger or treatment works treating domestic sewage that it is covered by a general permit in accordance with paragraph (b)(2)(vi) of this section. A complete and timely notice of intent (NOI) to be covered in accordance with general permit requirements, fulfills the requirements for permit applications for purposes of K.A.R. 28-16-59.”

(c) The provisions of 40 CFR 122.28(b)(2)(ii) shall be modified as follows: “(ii) The contents of each notice of intent shall be specified in each general permit and shall require the submission of information necessary for adequate program implementation, including at a minimum, the legal name and address of the owner, the legal name and address of the operator if different from the owner, the facility name and address, the type of facility, the type of discharge(s), the number of discharge points, the location using the public

land survey system of each discharge point, and the receiving stream(s). A general permit for storm water discharge associated with industrial activity from inactive mining, inactive oil and gas operations, or inactive landfills occurring on federal lands where an operator cannot be identified may contain alternative notice of intent requirements. Each notice of intent shall be signed in accordance with K.A.R. 28-16-59(e).”

(d) The provisions of 40 CFR 122.28(b)(3)(iii) shall be modified as follows: “(iii) Any owner or operator authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The owner or operator shall submit an application under K.A.R. 28-16-59, with reasons supporting the request, to the director no later than 90 days after the publication of the general permit by a state in accordance with applicable state law. Each request shall be processed under applicable state procedures. The request shall be granted by issuing an individual permit if the reasons cited by the owner or operator are adequate to support the request.” (Authorized by K.S.A. 65-165; implementing K.S.A. 65-165 and K.S.A. 65-171d; effective Sept. 27, 1993.)

28-16-154. Incorporation. 40 CFR 124.10(d)(1)(i) through (v) and (vii) as in effect on July 1, 1991, are adopted by reference except that the provisions of 40 CFR 124.10(d)(1)(v) shall be modified as follows: “(v) A brief description of the comment procedures required by K.A.R. 28-16-61(c) and (d) and the time and place of any hearing that will be held, including a statement of procedures to request a hearing, unless a hearing has already been scheduled, and other procedures by which the public may participate in the final permit decision.” (Authorized by K.S.A. 65-165; implementing K.S.A. 65-165 and K.S.A. 65-171d; effective Sept. 27, 1993.)

MUNICIPAL, COMMERCIAL AND INDUSTRIAL WASTEWATER LAGOON REQUIREMENTS

28-16-160. Definitions. The following terms and abbreviations shall be applicable to K.A.R. 28-16-160 through K.A.R. 28-16-174 and shall have the meanings specified in this regulation. Terms and abbreviations not defined in this regulation shall have the meanings specified in K.S.A. 65-101 et seq. and amendments thereto; articles 5, 13, 16, and 30; or the clean water act (CWA). For K.A.R. 28-16-160 through 28-16-174,

the definitions prescribed in this regulation shall control over any different definitions in any of the following: articles 5, 13, 16, and 30; federal regulations adopted by reference in articles 5, 13, 16, and 30; or the clean water act (CWA).

(a) “Change in operation” and “modification” mean any of the following:

(1) Any expansion or enlargement of a wastewater treatment system beyond the scope or boundaries established by a permit or KDHE-approved plans and specifications;

(2) any change or increase in production or wastewater-generating activities resulting in a change in the quantity or quality of the sewage or wastewater being generated; or

(3) any modification to the wastewater treatment system or an increase in the wastewater treatment system capacity beyond that addressed by the permit application, authorized by a permit, or authorized by KDHE-approved plans and specifications. As used in these regulations, a “modification” to a wastewater treatment system shall exclude routine cleaning, normal maintenance, and routine minor bank erosion repairs.

(b) “Commercial wastewater treatment system” means a wastewater treatment system serving a commercial enterprise or group of commercial enterprises for the purpose of treating primarily domestic sewage by physical, chemical, or biological means or by a combination of those methods.

(c) “CWA” and “federal clean water act” mean the federal water pollution control act, 33 U.S.C. 1251 et seq., as in effect on November 27, 2002.

(d) “Department” and “KDHE” have the meaning specified in K.A.R. 28-16-58.

(e) “Director” has the meaning specified in K.A.R. 28-16-58.

(f) “Division” has the meaning specified in K.A.R. 28-16-58.

(g) “Domestic sewage” has the meaning specified in K.A.R. 28-16-56c.

(h) “Environmental protection agency” and “EPA” have the meaning specified in K.A.R. 28-16-58.

(i) “Equus Beds,” for the purpose of these municipal, commercial, and industrial wastewater lagoon regulations, means the aquifer underlying the sections of land listed in the following table:

County	Range	Township	Section
Harvey	01W	22S	06, 07, 18, 19, 30, 31

County	Range	Township	Section
Harvey	01W	23S	06, 07, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	01W	24S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	02W	22S	All sections
Harvey	02W	23S	All sections
Harvey	02W	24S	All sections
Harvey	03W	22S	All sections
Harvey	03W	23S	All sections
Harvey	03W	24S	All sections
McPherson	01W	19S	31, 32, 33, 34, 35
McPherson	01W	20S	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33
McPherson	01W	21S	05, 06, 07, 18, 19, 30, 31
McPherson	02W	21S	12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
McPherson	03W	18S	28, 29, 30, 31, 32, 33
McPherson	03W	19S	04, 05, 06, 07, 08, 09, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
McPherson	03W	20S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34, 35
McPherson	03W	21S	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
McPherson	04W	18S	20, 21, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36
McPherson	04W	19S	01, 02, 03, 04, 09, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
McPherson	04W	20S	01, 02, 03, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, 36
McPherson	04W	21S	01, 02, 03, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36

County	Range	Township	Section
Reno	04W	22S	All sections
Reno	04W	23S	All sections
Reno	04W	24S	All sections
Reno	04W	25S	All sections
Reno	04W	26S	All sections
Reno	05W	22S	All sections
Reno	05W	23S	All sections
Reno	05W	24S	All sections
Reno	05W	25S	All sections
Reno	05W	26S	All sections
Reno	06W	22S	All sections
Reno	06W	23S	All sections
Reno	06W	24S	All sections
Reno	06W	25S	All sections
Reno	06W	26S	All sections
Reno	07W	22S	All sections
Reno	07W	23S	All sections
Reno	07W	24S	All sections
Reno	07W	25S	All sections
Reno	07W	26S	All sections
Sedgwick	01E	26S	06, 07, 08, 17, 18, 19, 20
Sedgwick	01W	25S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
Sedgwick	01W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32
Sedgwick	01W	27S	05, 06
Sedgwick	02W	25S	All sections
Sedgwick	02W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 34, 35, 36
Sedgwick	02W	27S	01
Sedgwick	03W	25S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36
Sedgwick	03W	26S	01, 02, 03, 04, 11, 12

(j) "Groundwater," for the purpose of these municipal, commercial, and industrial wastewater

lagoon liner regulations, means water located under the surface of the land that is or can be the source of supply for wells, springs, seeps, or streams or that is held in aquifers. For the lagoon regulations, this term shall be considered capable of being a source of supply for wells if at least one of the following conditions is met:

(1) The groundwater can be produced at a rate of 10 gallons or more per hour from a borehole with a diameter of nine or fewer inches. In determining the groundwater production rate for an excavation, borehole, or existing water or monitoring well, the quantity of produced water shall be adjusted for comparison purposes to the surface area of a borehole with a diameter of nine inches.

(2) Groundwater is currently being used within ½ mile of the proposed lagoon, regardless of the rate at which the groundwater can be produced.

(3) There is evidence of past groundwater use within ½ mile of the proposed lagoon.

(k) "Groundwater separation distance," for the purpose of these municipal, commercial, and industrial wastewater lagoon regulations, means the distance measured between the bottom of the lagoon and the top of the groundwater table. The bottom of the lagoon shall be determined by the lowest interior surface elevation, at finished grade, of the lagoon structure. The top of the groundwater shall be determined by the upper surface elevation of groundwater in an aquifer or, if the watertable fluctuates seasonally, the maximum annual surface elevation of the groundwater based on the average of the previous 10 years of groundwater data, if available.

(l) "Impermeable synthetic membrane liner" means a commercially manufactured membrane liner composed of synthetic materials commonly identified as being plastic or plastic polymer materials or other synthetic materials that, when properly installed, would provide for the more stringent of either of the following:

(1) A maximum monitored or calculated seepage rate of ¼ inch per day; or

(2) the liner manufacturer's criteria for the material and installation of the membrane liner expressed in units of volume per area per unit of time (gallons per square feet per day).

(m) "Industrial wastewater treatment system" means any of the following:

(1) A wastewater treatment system serving a city, county, township, sewer district, or other governmental unit;

(2) a state or federal agency, establishment, or institution;

(3) an industrial or commercial enterprise; or

(4) a group or combination of any of the entities specified in paragraphs (m)(1) through (3) treating primarily sewage or process-generated wastewater, other than domestic sewage, by physical, chemical, or biological methods or by a combination of these methods.

(n) "In existence," when used to describe a municipal, commercial, or industrial wastewater treatment system, means that the system meets one of the following conditions:

(1) Is constructed or installed, is capable of providing wastewater treatment, and is currently covered by a valid Kansas water pollution control permit on the effective date of these regulations;

(2) received the secretary's approval of construction plans and specifications before the effective date of these regulations and is under construction within two years after the date of approval; or

(3) is under construction, with plans and specifications approved by the secretary, on the effective date of these regulations.

(o) "Licensed geologist" means a geologist licensed to practice geology in Kansas by the Kansas board of technical professions.

(p) "Licensed professional engineer" means a professional engineer licensed to practice engineering in Kansas by the Kansas board of technical professions.

(q) "Liner" means any designed barrier in the form of in situ, layered, membrane, or blanket materials utilized or installed to reduce the potential for a significant hydrologic connection between sewage or process-generated wastewaters that are controlled or retained by wastewater treatment systems and waters of the state.

(r) "Maximum soil liner seepage rate" and "specific discharge" mean the flow rate through the soil liner, which is expressed as velocity (distance per unit of time). The maximum soil liner seepage rate shall be calculated as $v = k(h/d)$, in which "k" is the hydraulic conductivity (coefficient of permeability) and " (h/d) " is the hydraulic gradient. The hydraulic gradient is the maximum vertical distance "h" measured from the liquid surface to the liner bottom, divided by the thickness of the soil liner "d." When calculating the maximum soil liner seepage rate, the maximum operating depth, not considering design freeboard, shall be utilized.

(s) "Maximum synthetic membrane liner leakage rate" means a monitored or calculated leakage rate that is the more stringent of either $1/64$ inch per day or the liner manufacturer's criteria for the material and installation of the membrane liner expressed in units of volume per area per unit of time (gallons per square feet per day).

(t) "Minimum standards of design, construction, and maintenance" means effluent standards, effluent limitations, pretreatment requirements, other performance standards, and other standards of design, construction, and maintenance for wastewater control facilities published by the department as "minimum standards of design for water pollution control facilities" and adopted by reference in K.A.R. 28-16-58.

(u) "Monitoring" means procedures using any of the following methods:

(1) Conducting inspections of industrial process operations or the operation of municipal, commercial, or industrial wastewater treatment systems;

(2) the systematic collection and analysis of data on operational parameters of industrial process operations or the operation of municipal, commercial, or industrial wastewater treatment systems; or

(3) the systematic collection and analysis of data on the quality of the domestic sewage, process wastewater, wastewater sludge, groundwater, surface water, or soils at or in the vicinity of the wastewater lagoon or wastewater pond.

(v) "Monitoring well" and "observation well" mean a well constructed for sampling fluids or groundwater and for observing subsurface phenomena including the presence of fluids, groundwater elevations, the direction of groundwater flow, and the velocity of groundwater flow.

(w) "Municipal wastewater treatment system" means any of the following:

(1) A wastewater treatment system serving a city, county, township, sewer district, or other governmental unit;

(2) a state or federal agency, establishment, or institution treating primarily domestic sewage by physical, chemical, or biological methods or by a combination of these methods; or

(3) a wastewater treatment system operated by an entity listed in paragraph (w)(1) or (2) that receives significant quantities of domestic wastewater, process wastewater comprised primarily of conventional pollutants, non-contact cooling water, boiler blowdown, or process wastewater iden-

tified in K.A.R. 28-16-162(f) from industrial facilities if the introduction of these wastes meets the following conditions:

(A) Conforms with the EPA-promulgated pretreatment standards specified in K.A.R. 28-16-88;

(B) does not interfere or upset the operation of the wastewater treatment system;

(C) does not cause these wastes to pass through the treatment system either partially treated or untreated into the environment in unacceptable concentrations or quantities;

(D) does not cause a violation of the water pollution control permit;

(E) does not violate surface water quality standards; and

(F) does not adversely impact use of the wastewater for irrigation or adversely impact use of wastewater sludge for land application.

(x) "Oil or gas well" shall have the meaning assigned to the term "well" in K.S.A. 55-150, and amendments thereto.

(y) "Permit" and "water pollution control permit" mean an authorization, license, or equivalent control document issued by the department. A permit shall not include any document that has not yet been subject to final action by the department, including a draft or proposed permit.

(z) "Permittee" means a person who is authorized by a Kansas water pollution control permit to operate, or a person who is responsible for overseeing the operation of, a wastewater treatment system.

(aa) "Person" has the meaning specified in K.S.A. 65-170a, and amendments thereto.

(bb) "Pollution" has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(cc) "Precipitation runoff" and "stormwater runoff" mean the rainwater or the meltwater that is derived from snow, hail, sleet, or other forms of atmospheric precipitation and that flows by gravity over the surface of the land.

(dd) "Secretary" has the meaning specified in K.A.R. 28-16-58.

(ee) "Sensitive groundwater areas," for the purpose of these municipal, commercial, and industrial wastewater lagoon regulations, means aquifers generally comprised of alluvial aquifers, the area within the boundaries of the Equus Beds groundwater management district no. 2 (GMD #2), and the Dune Sand Area located south of the great bend of the Arkansas River. A sensitive groundwater area shall be any section of land listed in "Kansas sensitive groundwater areas for

wastewater lagoons," prepared by KDHE and dated January 1, 2005, which is hereby adopted by reference.

(ff) "Sewage" and "wastewater" have the meaning specified in K.S.A. 65-164, and amendments thereto.

(gg) "Variance" means the secretary's written approval authorizing an alternative action to any of the requirements of these municipal, commercial, or industrial wastewater lagoon regulations, the standards adopted by these regulations, or the "minimum standards of design for water pollution control facilities," as adopted by reference in K.A.R. 28-16-58.

(hh) "Wastewater lagoon" and "wastewater pond" mean excavated or diked structures provided or used for retaining or treating municipal, commercial, or industrial sewage, process wastewater, cooling water, or stormwater runoff.

(ii) "Wastewater treatment system" means structures or devices that collect, store, stabilize, treat, or otherwise control pollutants so that after the discharge, disposal, or land application of wastewater treatment sludge or treated wastewater, water pollution will not occur, and the public health and waters of the state will be protected. This term shall not include lagoons and earthen basins that are regulated and permitted as a solid waste processing facility or solid waste landfill pursuant to K.S.A. 65-3401 et seq., and amendments thereto, and article 29. Discharges of wastewater from lagoons or earthen basins that are regulated and permitted as a solid waste processing facility or solid waste landfill shall be prohibited unless authorized by a Kansas water pollution control permit.

(jj) "Waters of the state" has the meaning specified in K.S.A. 65-161, and amendments thereto.

(kk) "Water well" has the meaning specified in K.S.A. 82a-1203, and amendments thereto. (Authorized by K.S.A. 65-165 and K.S.A. 2004 Supp. 65-171d; implementing K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-161. Municipal and commercial lagoons: general provisions. The following general provisions shall apply to municipal and commercial wastewater treatment system lagoons. (a) New or modified municipal or commercial wastewater treatment system lagoons shall be prohibited if the groundwater separation distance be-

tween the lagoon bottom and the groundwater table is 10 feet or less.

(b) For each new or modified lagoon, the permittee may employ a constructed soil liner if the maximum soil liner seepage rate is less than $\frac{1}{4}$ inch per day and the lagoon is not constructed over sensitive groundwater areas, including the Equus Beds.

(c) For each new or modified lagoon constructed over sensitive groundwater areas, excluding the Equus Beds, the permittee may employ a constructed soil liner if the maximum soil liner seepage rate is less than $\frac{1}{10}$ inch per day.

(d) For each new or modified lagoon constructed over the Equus Beds, the permittee shall, at a minimum, employ a single impermeable synthetic membrane liner and provide for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171. Constructed soil liners may be employed if all of the following conditions are met:

(1) The groundwater separation distance between the lagoon bottom and the groundwater table is greater than 10 feet.

(2) The hydrogeologic information developed for the site indicates that in situ soils exist in sufficient quantity to provide an effective pollution barrier to protect groundwater.

(3) A constructed soil liner will provide a maximum soil liner seepage rate of less than $\frac{1}{10}$ inch per day.

(4) The design provides for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171.

(e) For each new or modified lagoon, the permittee may utilize a single impermeable synthetic membrane liner, in lieu of a constructed soil liner.

(f) Municipal and commercial wastewater treatment system lagoons in existence on the effective date of this regulation shall not be required to be modified or retrofitted to comply with the provisions of this regulation, unless either of the following occurs:

(1) The secretary determines that environmental or public health threats result from the operation of the lagoon, or data exists showing the actual or potential soil or water pollution.

(2) The modification, replacement, or expansion of a municipal or commercial wastewater lagoon results in the lagoon being dewatered, and the secretary orders the implementation of specific lagoon improvements to address conditions that result in noncompliance with statutory, reg-

ulatory, or permit requirements or that fail to ensure protection of public health or the environment. The permittee shall implement the specific improvements required by the secretary.

(g) For the purpose of K.A.R. 28-16-160 through K.A.R. 28-16-174, an actual or potential environmental or public health threat may be deemed to exist if physical, chemical, biological, or radiological substances, or a combination of these substances, is released into subsurface waters of the state and results in a concentration or amount of a substance in excess of the numerical criteria designated for aquatic life protection, agricultural use, or public health protection as provided in the "Kansas surface water quality standards: tables of numeric criteria," dated December 6, 2004, which is adopted by reference in K.A.R. 28-16-28e. If the background concentration of a substance is naturally occurring and is greater than the numerical criteria, the background concentration shall be considered the criteria.

(h) No person shall construct, operate, or maintain any municipal or commercial wastewater lagoon without obtaining a permit or permit modification from the department. (Authorized by K.S.A. 65-165, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-162. Industrial lagoons: general provisions. The following general provisions shall apply to industrial wastewater treatment system lagoons. (a) New or modified industrial wastewater treatment system lagoons shall be prohibited if the groundwater separation distance between the lagoon bottom and the groundwater table is 10 feet or less.

(b) For each new or modified lagoon utilized solely for the containment or treatment of domestic sewage, the permittee may employ a constructed soil liner if the maximum soil liner seepage rate is less than $\frac{1}{4}$ inch per day and the lagoon is not constructed over sensitive groundwater areas, including the Equus Beds.

(c) For each new or modified lagoon constructed over sensitive groundwater areas, excluding the Equus Beds, and utilized solely for the containment or treatment of domestic sewage, the permittee may employ a constructed soil liner if

the maximum soil liner seepage rate is less than $\frac{1}{10}$ inch per day.

(d) For each new or modified lagoon constructed over the Equus Beds and utilized solely for the containment or treatment of domestic sewage, the permittee shall, at a minimum, employ a single impermeable synthetic membrane liner and provide for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171. Constructed soil liners may be employed if all of the following conditions are met:

(1) The groundwater separation distance between the lagoon bottom and the groundwater table is greater than 10 feet.

(2) The hydrogeologic information developed for the site indicates that in situ soils exist in sufficient quantity to provide an effective pollution barrier to protect groundwater.

(3) A constructed soil liner will provide a maximum soil liner seepage rate of less than $\frac{1}{10}$ inch per day.

(4) The design provides for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171.

(e) For each new or modified lagoon utilized solely for the containment or treatment of domestic sewage, the permittee may utilize a single impermeable synthetic membrane liner, in lieu of a constructed soil liner.

(f) For each new or modified industrial wastewater lagoon, the permittee may utilize either a single impermeable synthetic membrane liner or a soil liner with a maximum soil liner seepage rate of less than $\frac{1}{4}$ inch per day if the wastewater lagoons or ponds are utilized for the containment or treatment of process-generated wastewater and are limited to the following:

(1) Sediment control and aggregate wash water ponds used at limestone quarries;

(2) sediment control ponds used at clay pit operations;

(3) sediment control ponds used for classification and washing operations associated with sand and gravel dredging;

(4) ponds receiving once-through, non-contact cooling water in which there is no chemical addition to the cooling water and where the concentration of total dissolved solids in the cooling water is not increased over the concentration of total dissolved solids in the groundwater;

(5) ponds receiving recirculated cooling water meeting any of the following conditions:

(A) The cooling water, if treated, is treated only with chlorine or bromine;

(B) the total dissolved solids and salt concentration of the cooling water in the ponds are not increased significantly above the groundwater source concentration;

(C) the total dissolved solids and salt concentration of the cooling water in the ponds do not exceed criteria that would prohibit the cooling water from being discharged in conformance with the Kansas surface water quality standards specified in K.A.R. 28-16-28b, 28-16-28c, 28-16-28d, and 28-16-28e; or

(D) the total dissolved solids and salt concentration of the cooling water in the ponds can be land-applied at agronomic application rates without the use of dilution water or freshwater application for controlling dissolved solids and salts;

(6) erosion-control sediment ponds associated with construction activities;

(7) tailwater control ponds utilized for the irrigation of wastewater from an industrial wastewater treatment system if the tailwater control pond is completely dewatered immediately at the completion of each irrigation application cycle;

(8) lime sludge storage lagoons associated with potable water-softening operations;

(9) lagoons that receive concrete washed off of, and from, concrete delivery trucks; and

(10) lagoons utilized for the containment or treatment of coal pile stormwater runoff, coal ash, and air pollution control scrubber wastes from facilities utilizing low-sulfur coal produced in the powder river basin of Wyoming.

(g) Each new industrial wastewater lagoon utilized for the containment or treatment of industrial process wastewater shall utilize an impermeable synthetic membrane liner system with a maximum synthetic membrane liner leakage rate that is less than the more stringent of either of the following:

(1) A maximum monitored or calculated seepage rate of $\frac{1}{64}$ inch per day; or

(2) the liner manufacturer's criteria for the material and installation of the synthetic membrane liner system expressed in units of volume per area per unit of time (gallons per square feet per day).

(h) Industrial wastewater treatment system lagoons in existence on the effective date of this regulation shall not be required to be modified or retrofitted to comply with the provisions of this regulation, unless either of the following occurs:

(1) The secretary determines that environmental or public health threats result from the oper-

ation of the lagoon, or data exists showing the actual or potential soil or water pollution.

(2) The modification, replacement, or expansion of an industrial wastewater lagoon results in the lagoon being dewatered, and the secretary or designee orders the implementation of specific lagoon improvements to address conditions that result in noncompliance with statutory, regulatory, or permit requirements or that fail to ensure protection of public health or the environment. Only those specific improvements required by the secretary or designee shall be required to be implemented by the permittee.

(i) For the purpose of K.A.R. 28-16-160 through K.A.R. 28-16-174, an actual or potential environmental or public health threat may be deemed to exist if physical, chemical, biological, or radiological substances, or a combination of these substances, is released into subsurface waters of the state and results in a concentration or amount of a substance in excess of the numerical criteria designated for aquatic life protection, agricultural use, or public health protection as provided in the "Kansas surface water quality standards: tables of numeric criteria," dated December 6, 2004, which is adopted by reference in K.A.R. 28-16-28e. If the background concentration of a substance is naturally occurring and is greater than the numeric criteria, the background concentration shall be considered the criteria.

(j) Land-based sand and gravel pits shall be exempt from the provisions of K.A.R. 28-16-160 through 28-16-174 if the only water or wastewater directed to the dredge pit consists of the following:

- (1) Dredge return flows;
- (2) flows generated from aggregate classification; and
- (3) flows from washing dredged aggregate if water used in creating these flows originates from and is returned to the dredge pit.

(k) No person shall construct, operate, or maintain any industrial wastewater lagoon without obtaining a permit or permit modification from the department. (Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-163. Required hydrogeologic information for new or modified municipal, commercial, or industrial wastewater la-

goons. (a) Each hydrogeologic investigation that is conducted by or on behalf of the permittee for new or modified wastewater lagoons shall consist of borings or excavations to a depth of at least 10 feet below the bottom of the wastewater lagoon or to impenetrable bedrock if impenetrable bedrock is encountered less than 10 feet below the lagoon bottom. The bottom of the lagoon shall be determined by the lowest interior surface elevation, at finished grade, of the lagoon structure.

(b) The permittee shall ensure that a minimum of one boring or excavation is performed for each acre of wastewater lagoon, with the area being calculated based on the interior dike dimensions measured at the top of the dike. If the wastewater lagoon is less than one acre in size, a minimum of one boring or excavation shall be required.

(c) The minimum requirements for a hydrogeologic site investigation shall consist of the following:

(1) The logging of all borings or excavations identifying the soil types encountered;

(2) recording the ground surface elevation and location of each boring or excavation. The elevation may be based upon the project datum;

(3) measuring and recording static groundwater levels after the groundwater level has stabilized following the boring or excavation. If no water is readily evident at the time of the boring or excavation, the boring or excavation shall be left open for a minimum of 24 hours. If, after 24 hours, no water is observed, a determination of "no groundwater" shall be reported. Water wells in the immediate vicinity of the proposed wastewater lagoon may be used to help document the presence or absence of groundwater and establish the groundwater elevation, in addition to the borings or excavations, for the hydrogeologic investigation if the secretary or designee agrees to accept the data as being representative of the proposed site;

(4) the collection of sufficient representative soil samples, if in situ soil materials will be employed in the construction of the compacted soil liner or the lagoon structure, for analysis in determining soil classification, compaction, and permeability for use in designing the lagoon soil liner or embankments, as appropriate; and

(5) a summary, to be submitted with or as a part of the engineering report, evaluating the hydrogeologic information obtained and an analysis of that information regarding the expected impact that the observed hydrogeologic conditions will have on the construction of lagoon embankments

and, as appropriate, the expected performance of a constructed soil liner in regard to complying with the maximum soil liner seepage rate requirement.

(d) Hydrogeologic information shall not be required for erosion-control ponds associated with construction activities.

(e) Each permit applicant or permittee, if directed by the secretary, shall notify the department a minimum of two days before performing any hydrogeologic investigation fieldwork activities to allow the opportunity for department staff to witness the activities.

(f) All hydrogeologic information shall be obtained by or under the direct supervision of either a licensed professional engineer or a licensed geologist. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-170b and K.S.A. 2003 Supp. 65-171d; effective May 20, 2005.)

28-16-164. Municipal, commercial, and industrial wastewater treatment system lagoons: soil liner design. (a) Each permit applicant shall submit with the construction plans and specifications hydrogeologic information, soil testing data, and design calculations documenting that the proposed use of in situ soils or a constructed soil liner is capable of meeting the required maximum soil liner seepage rate.

(b) Whether in situ soils or a constructed soil liner is utilized for the wastewater lagoon, a minimum of one foot of natural soil or one foot of constructed liner shall be provided. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, and K.S.A. 2003 Supp. 65-171d; effective May 20, 2005.)

28-16-165. Municipal, commercial, and industrial soil liners: postconstruction testing. (a) Each permit applicant or permittee proposing a new municipal, commercial, or industrial wastewater treatment lagoon that will employ a soil liner system shall, when submitting construction plans and specifications to KDHE for review and consideration for approval, also submit information addressing each method to be employed for postconstruction testing of the soil liner for compliance with the required maximum soil liner seepage rate. Each proposed test method shall provide an appropriate degree of monitoring sensitivity and accuracy in addressing the following test variables:

- (1) The maximum soil liner seepage rate;
- (2) the surface area of the lagoon being tested;

- (3) the proposed duration of the test;
- (4) the time of year and general weather conditions expected during the test period;
- (5) the proposed monitoring equipment;
- (6) the expected magnitude of evaporation during the test period;
- (7) the degree that wind and wave action will impact measurement accuracy; and
- (8) the frequency of data collection during the test period.

(b) Within 45 days following the completion of construction, the permittee or applicant shall submit to the department a certification and, if requested, any supporting documentation, confirming that the wastewater lagoon and the wastewater lagoon liner system were constructed in accordance with the plans and specifications approved by the secretary.

(c) The certification specified in subsection (b) shall be signed by a licensed professional engineer who monitored the construction activities and installation of the soil liner system. The certification shall be based on actual observations by the licensed professional engineer, or designee, during construction and any field or laboratory data developed during or following construction.

The construction activities and any sample collection for field or laboratory data developed during or following construction shall be directly observed by the licensed professional engineer or designee. The monitoring of construction activities or the collection of samples or data shall be conducted by the licensed professional engineer or a designee under the licensed professional engineer's direct supervision.

(d)(1) Within eight months following approval by the secretary to initiate the filling or use of the wastewater lagoon, the permittee or permit applicant shall conduct and report, to KDHE, the results of the postconstruction testing of the soil liner for compliance with the required maximum soil liner seepage rate. This report shall meet the requirements specified in paragraph (d)(2). If the required maximum soil liner seepage rate can not be met, the report submitted to KDHE for review and consideration for approval shall provide a plan and schedule of proposed actions required to achieve compliance.

(2) The postconstruction testing specified in paragraph (d)(1) shall be conducted in conformance with the method or methods approved by the secretary to ensure the protection of public health and the environment. The postconstruction

testing of the soil liner shall be conducted by a licensed professional engineer or a designee under the licensed professional engineer's direct supervision.

The permittee or permit applicant shall provide a certification signed by the licensed professional engineer as to whether or not the soil liner meets the required maximum soil liner seepage rate.

(e) Each permit applicant, when directed by the secretary, shall notify the department a minimum of two days before performing any soil liner seepage testing to allow the opportunity for department staff to witness the test.

(f) Postconstruction testing shall not be required for erosion-control sediment ponds associated with construction activities. (Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 65-170b, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-166. Requirements for impermeable synthetic membrane liners in municipal or commercial wastewater treatment system lagoons. (a) The following requirements shall apply to municipal or commercial impermeable synthetic membrane liners:

(1) The liner shall be at least 30 mils (0.030 inch) in thickness.

(2) The engineer designing the wastewater lagoon shall obtain a certification from the liner manufacturer that includes the following:

(A) Confirmation that the specified liner is compatible for use with the proposed wastewater to be retained or treated;

(B) confirmation that the specified liner is resistant to UV (ultraviolet) light; and

(C) the manufacturer's estimated leakage, permeability, or transmissivity rate of the specified liner expressed in units of volume per area per time (gallons per square foot per day) for a properly installed liner. The leakage, permeability, or transmissivity rate shall reflect the expected rate of movement of fluids through a synthetic membrane liner when considering the properties of the liner material, liner thickness, normally expected manufacturing defects in the liner material, and normally expected defects associated with the seaming and installation process.

(b) Compaction of the wastewater treatment lagoon embankments and upper six inches of the interior lagoon bottom below the synthetic liner

shall be a minimum of 95 percent of the maximum standard proctor density at optimum moisture to optimum moisture plus three percent. The maximum thickness of the layers of material to be compacted shall not exceed six inches. The moisture content range of the soils being compacted shall be optimum moisture to optimum moisture plus three percent. The maximum size of dirt clods in the compacted soil shall be less than one inch in diameter.

(c) The liner shall be anchored at the top of the wastewater lagoon dike. The method of anchoring the liner shall conform to the manufacturer's installation instructions.

(d) The liner shall be installed in accordance with the liner manufacturer's instructions and guidance. Either the liner shall be installed by a contractor experienced in the installation of impermeable synthetic membrane liners, or the contractor shall provide for the on-site supervision of the liner installation by an individual that has experience installing liners.

(e) The construction plans and specifications shall include provisions for the use of a reliable seam-testing method that shall be used to verify the adequacy of the seaming process. The methods for destructive and non-destructive seam testing shall be specified, along with a protocol describing the number of tests per lineal foot of field seam, the size of the destructive test specimen required, and any other quality control provisions recommended by the liner manufacturer. All field seams shall be subjected to non-destructive testing.

(f) The Kansas "minimum standards of design for water pollution control facilities" shall be utilized in the design and the establishment of construction criteria for wastewater lagoons, unless different criteria are specified in K.A.R. 28-16-160 through K.A.R. 28-16-174. If there is any difference between the design and construction criteria specified in K.A.R. 28-16-160 through K.A.R. 28-16-174 and either the Kansas "minimum standards of design for water pollution control facilities" or regulations in articles 5, 13, or 30, the design and construction criteria specified in K.A.R. 28-16-160 through K.A.R. 28-16-174 shall control.

(g) A minimum of two feet of in situ or compacted soil shall be provided beneath the liner or bedding material.

(h) Each applicant or permittee shall develop and submit with the construction plans and spec-

ifications a contingency plan, for KDHE review and consideration for approval, that outlines procedures for pond containment and operation during periods of maintenance and during periods of required dewatering if a liner fails or needs to be repaired.

(i)(1) Each permittee shall immediately cease operations or shall comply with the instructions of the secretary, if the secretary determines that an imminent threat or the potential for an imminent threat to public health or the environment exists due to any unsafe operating condition. Considerations regarding an imminent threat or the potential for an imminent threat to public health or the environment shall include the following:

- (A) The pollutant or pollutants involved;
- (B) the integrity of the impermeable synthetic membrane liner;
- (C) the depth to groundwater;
- (D) the monitoring well or water supply well data;
- (E) the mobility of the pollutant or pollutants through soil or groundwater;
- (F) the potential exposure to the public; and
- (G) the potential for uncontrolled release into the environment.

(2) The permittee may resume operations if the secretary determines that the wastewater lagoon no longer poses a risk to public health and the environment. (Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-167. Requirements for impermeable synthetic membrane liners in industrial wastewater treatment system lagoons.

(a) The following requirements shall apply to industrial impermeable synthetic membrane liners:

(1) The impermeable synthetic membrane liner system shall be comprised of primary and secondary impermeable synthetic membrane liners with an intermediate leak detection system provided.

(2) Each primary and secondary liner shall be at least 30 mils (0.030 inch) in thickness.

(3) The licensed professional engineer designing the wastewater lagoon shall obtain a certification from the liner manufacturer that includes the following:

(A) Confirmation that the specified liner is compatible for use with the proposed wastewater to be retained or treated;

(B) confirmation that the specified liner is resistant to UV (ultraviolet) light; and

(C) the manufacturer's estimated leakage, permeability, or transmissivity rate of the specified liners expressed in units of volume per area per time (gallons per square feet per day) for a properly installed liner. The leakage, permeability, or transmissivity rate shall reflect the expected rate of movement of fluids through a synthetic membrane liner when considering the properties of the liner material, liner thickness, normally expected manufacturing defects in the liner material, and normally expected defects associated with the seaming and installation process.

(b) A minimum of two cells shall be provided to allow for flexibility of operation and maintenance of the wastewater lagoon system. This requirement may be waived by the secretary if an approved alternative wastewater disposal option is available and the operator agrees to employ the alternative wastewater disposal option when the wastewater lagoon system is required to be dewatered. Each approved alternative wastewater disposal option shall include a means of disposal for which the required permits, licenses, or authorizations have been obtained.

(c) The primary and secondary liners shall be separated to provide a conduit to allow the movement of any fluid between the liners so that the fluid can be directed to the leak-detection monitoring location for detection and removal. Clean sand, pea gravel, geotextile fabric, and geonet-type materials may be employed to provide the required separation between the primary and secondary liners if a conduit allowing for fluid movement to the leak-detection monitoring location is provided. Alternatives may be recommended by the liner manufacturer or design engineer and shall be submitted to the secretary for review and consideration for approval.

(d) The secondary liner in the pond bottom shall have at least a 2.5 percent slope towards the leak-detection system's monitoring sump, man-hole, observation pipe, or other similar leak-detection monitoring mechanism. Any piping used to collect or route fluids to the leak-detection monitoring mechanism shall have at least a one percent slope. The leak-detection system design shall ensure that the maximum travel time required for fluid penetrating the liner to reach the leak-detection monitoring location is 24 hours or less.

(e) The design of the impermeable synthetic

membrane liner system shall provide for the capability to perform the following:

(1) Routinely dewater and monitor the volume of fluid removed from the intermediate space between the primary and secondary liners;

(2) pump a volume of fluid generated that is equal to 10 times the maximum synthetic membrane liner leakage rate; and

(3) collect a representative sample of fluid being pumped.

(f) Compaction of the wastewater treatment lagoon embankments and upper six inches of the interior lagoon bottom below the secondary liner shall be a minimum of 95 percent of the maximum standard proctor density at optimum moisture to optimum moisture plus three percent. The maximum thickness of the layers of material to be compacted shall not exceed six inches. The moisture content range of the soils being compacted shall be optimum moisture to optimum moisture plus three percent. The maximum size of dirt clods in the compacted soil shall be less than one inch in diameter.

(g) The primary and secondary liners shall be anchored at the top of the wastewater lagoon dike. The method of anchoring the primary and secondary liners shall conform to the manufacturer's installation instructions.

(h) The liner shall be installed in accordance with the liner manufacturer's instructions. Either the liner shall be installed by a contractor experienced in the installation of impermeable synthetic membrane liners, or the contractor shall provide for the on-site supervision of the liner installation by an individual that has experience installing liners.

(i) The construction plans and specifications shall include provisions for the use of a reliable seam-testing method that shall be used to verify the adequacy of the seaming process. The methods for destructive and non-destructive seam testing shall be specified, along with detailed procedures describing the number of tests per lineal foot of field seam, the size of the destructive test specimen required, and any other pertinent quality control provisions recommended by the liner manufacturer. All field seams shall be subjected to non-destructive testing.

(j) The Kansas "minimum standards of design for water pollution control facilities" shall be utilized in the design and the establishment of construction criteria for wastewater lagoons, unless different criteria are specified in K.A.R. 28-16-

160 through K.A.R. 28-16-174. If there is any difference between the design and construction criteria specified in K.A.R. 28-16-160 through K.A.R. 28-16-174 and either the Kansas "minimum standards of design for water pollution control facilities" or regulations in articles 5, 13, or 30, the design and construction criteria specified in K.A.R. 28-16-160 through K.A.R. 28-16-174 shall control.

(k) A minimum of two feet of in situ or compacted soil shall be provided beneath the bottom of the secondary liner or liner bedding material.

(l) Each applicant or permittee shall develop and submit with the construction plans and specifications a contingency plan, for the secretary's review and consideration for approval, that outlines procedures for pond containment and operation during periods of maintenance and periods of required dewatering if a liner fails or needs to be repaired or replaced.

(m)(1) Each permittee shall immediately cease operations or shall comply with the instructions of the secretary, if the secretary determines that an imminent threat or the potential for an imminent threat to public health or the environment exists due to any unsafe operating condition. Considerations regarding an imminent threat or the potential for an imminent threat to public health or the environment shall include the following:

(A) The pollutant or pollutants involved;

(B) the integrity of the impermeable synthetic membrane liner;

(C) the depth to groundwater;

(D) the monitoring well or water supply well data;

(E) the mobility of the pollutant or pollutants through soil or groundwater;

(F) the potential exposure to the public; and

(G) the potential for uncontrolled release into the environment.

(2) The permittee may resume operations if the secretary determines that the wastewater lagoon no longer poses a risk to public health and the environment. (Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-168. Postconstruction testing of municipal, commercial, and industrial impermeable synthetic membrane liners. (a) Each permit applicant or permittee proposing a new

municipal, commercial, or industrial wastewater treatment lagoon that will employ an impermeable synthetic membrane liner shall, when submitting construction plans and specifications to the secretary for review and consideration for approval, also submit information addressing each method to be employed for postconstruction testing of the impermeable synthetic membrane liner to ensure that it is installed properly and for compliance with the required maximum synthetic membrane liner leakage rate. Each proposed test method shall provide an appropriate degree of monitoring sensitivity and accuracy in addressing the following test variables:

- (1) The maximum synthetic membrane liner leakage rate;
- (2) the surface area of the lagoon being tested;
- (3) the proposed duration of the test;
- (4) the time of year and general weather conditions expected during the test period;
- (5) the proposed monitoring equipment;
- (6) the expected magnitude of evaporation during the test period;
- (7) the degree that wind and wave action will impact measurement accuracy; and
- (8) the frequency of data collection during the test period.

(b) Within 45 days following the completion of construction, the permittee or applicant shall submit to the department a certification and, if requested, any supporting documentation, confirming that the wastewater lagoon and the wastewater lagoon liner system were constructed in accordance with the plans and specifications approved by the secretary.

(c) The certification shall be signed by the licensed professional engineer who monitored the construction activities and installation of the impermeable synthetic membrane liner or liner system. The licensed professional engineer's certification shall be based on actual observations during construction and installation and any field or laboratory data developed during or following construction or installation.

The construction and installation activities and any testing or sample collection for field or laboratory data developed during or following construction and installation shall be directly observed by the licensed professional engineer or designee. The monitoring of construction and installation activities or the collection of samples or data shall be conducted by a licensed professional

engineer or a designee under the licensed professional engineer's direct supervision.

(d)(1) Within two months, or an alternative time frame proposed by the design engineer and approved by secretary, and following approval by the secretary to initiate the filling or use of the lagoon, the permittee shall conduct and report, to KDHE, the results of the postconstruction testing of the impermeable synthetic membrane liner or liner system for compliance with the required maximum synthetic membrane liner leakage rate. This report shall meet the requirements specified in paragraph (d)(2). If the required maximum synthetic membrane liner leakage rate can not be met, the report shall provide a plan and schedule of proposed actions required to achieve compliance, for review and consideration for approval by the secretary.

(2) The postconstruction testing specified in paragraph (d)(1) shall be conducted in conformance with the method or methods approved by the secretary, pursuant to subsection (a), to ensure the protection of public health and the environment. The postconstruction monitoring or testing of the synthetic membrane liner or liner system shall be conducted by a licensed professional engineer or a designee, under the engineer's supervision.

The permittee shall provide a certification signed by the licensed professional engineer as to whether or not the synthetic membrane liner or liner system complies with the maximum synthetic membrane liner leakage rate.

(e) Each permit applicant, when directed by the secretary, shall notify the department a minimum of two days before performing any leak-detection testing, on the entire liner, to allow the opportunity for department staff to witness the test. (Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 65-170b, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-169. Minimum standards of design, construction, and maintenance. (a) The permit applicant or permittee shall design and construct municipal, commercial, and industrial wastewater treatment system lagoons to conform to effluent standards, effluent limitations, pretreatment requirements, other performance standards, and standards of design, construction, and maintenance for wastewater control facilities pub-

lished by the department as “minimum standards of design for water pollution control facilities” and adopted by reference in K.A.R. 28-16-58, or the provisions of K.A.R. 28-16-160 through 28-16-174.

(b) If there is a discrepancy between K.A.R. 28-16-160 through 28-16-174 and the “minimum standards of design, construction, and maintenance” as defined in K.A.R. 28-16-160, K.A.R. 28-16-160 through 28-16-174 shall control. (Authorized by K.S.A. 2003 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-170. Water, oil, or gas wells. (a) Each permit applicant or permittee submitting construction plans for a municipal, commercial, or industrial wastewater treatment system lagoon shall identify, on the construction plans, the location of any active, abandoned, or plugged water, oil, or gas well within 600 feet of any proposed location for a wastewater lagoon.

(b) If the permit applicant or permittee is unable to confirm the exact location of any well or wells, the permit applicant or permittee shall include in the construction plans a note indicating the potential for the well or wells to be encountered in the vicinity of the proposed wastewater lagoon.

(c) Each active, abandoned, or plugged water, oil, or gas well that is encountered during construction and that was not identified or located on the construction plans shall be reported to the department within 48 hours of discovery. Construction activities that have the potential to impact the well shall be immediately terminated until the secretary or designee authorizes the construction to resume. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-165, 65-166, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-171. Monitoring wells. (a) The installation and sampling of groundwater monitoring wells in the vicinity of any municipal, commercial, or industrial wastewater treatment system lagoon may be required by the secretary. Equivalent technology, in lieu of requiring the installation and sampling of groundwater monitoring wells, may be required or authorized by the secretary.

(b) The location, design, and proposed construction of monitoring wells or the use of equiv-

alent technology in lieu of monitoring wells shall be subject to approval by the secretary. Approval of the location, design, and proposed construction of monitoring well or wells or the use of equivalent technology shall be approved by the secretary before the permit applicant or permittee initiates installation.

(c) Groundwater monitoring wells shall be constructed by KDHE-licensed water well contractors.

(d) When directed by KDHE to install any groundwater monitoring well or wells, the applicant or permittee shall submit a groundwater monitoring plan for review and approval by the secretary. Each plan shall address the following:

(1) The location of each proposed monitoring well;

(2) the monitoring well design and materials proposed for construction;

(3) a quality assurance plan addressing techniques for monitoring the static groundwater elevation, collecting samples, preserving samples, and laboratory analysis by a KDHE-certified laboratory for the parameters being analyzed. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164, 65-170b, and K.S.A. 2003 Supp. 65-171d; effective May 20, 2005.)

28-16-172. Plan and specification approval; permit issuance. (a) Neither the approval of an engineering report, hydrogeologic report, construction plans, or construction specifications nor the issuance of a permit by the secretary shall prohibit the secretary from taking any enforcement action if the municipal, commercial, or industrial wastewater lagoon fails to protect waters of the state, meet any specified effluent criteria, or comply with state surface water quality standards. In addition, an approval or permit issuance shall not constitute a defense by the permit applicant or permittee regarding the violation of any statute, regulation, permit condition, or requirement.

(b) The permit applicant or permittee shall not deviate from the plans and specifications submitted to and approved by the secretary, unless amended plans and specifications showing the proposed changes are submitted to and approved by the secretary. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164 and K.S.A. 2003 Supp. 65-171d; effective May 20, 2005.)

28-16-173. Municipal, commercial, and

industrial wastewater lagoons: closure requirements. (a) Each wastewater lagoon permittee shall notify the secretary of any plans to cease operation of, close, or abandon a municipal, commercial, or industrial wastewater lagoon or lagoon system.

(b) Each permittee shall maintain and comply with a valid Kansas water pollution control permit until the secretary approves the closure of the wastewater lagoon or lagoon system.

(c) Each permit applicant or permittee shall develop and submit a wastewater lagoon closure plan for review and consideration for approval by the secretary along with the construction plans and specifications for any new, modified, or expanded wastewater lagoon or lagoon system.

(d) Each wastewater lagoon closure plan shall, at a minimum, include all of the following:

(1) The procedure for deactivating the various wastewater collection and treatment units employed at the facility;

(2) the procedures to be employed to remediate, remove, or dispose of wastewater, accumulated sludge in the wastewater lagoon or lagoons, any impermeable synthetic membrane liner, contaminated soils, and contaminated groundwater;

(3) a description regarding the proposed maintenance, deactivation, conversion, or demolition of the wastewater lagoon structure;

(4) procedures addressing the plugging of any water wells or groundwater monitoring wells associated with the facility, wastewater lagoon, or wastewater lagoon system; and

(5) an estimate of the design life of an impermeable synthetic membrane liner if this type of liner is utilized at the wastewater lagoon.

(e) Each permittee of a wastewater lagoon shall prepare or update, when directed by the secretary, a wastewater lagoon closure plan for review and consideration for approval by the secretary and shall retain the plan at the facility in a manner that is accessible for inspection by the department.

(f) The closure of a wastewater lagoon or lagoon system shall be completed within one year of authorization by the secretary to initiate closure.

(g) Each permittee requesting an extension of time for closure of a wastewater lagoon shall submit the request in writing to the secretary, and the request shall detail the reasons for the requested extension. Consideration of weather conditions and the legal change in ownership of the facility may constitute grounds for the secretary's

consideration in granting an extension. (Authorized by K.S.A. 2003 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

28-16-174. Variance from specific requirements. (a) Each person seeking a variance from any of the requirements in K.A.R. 28-16-160 through 28-16-173 shall submit to the secretary, in writing, a request for the variance and shall provide information and data relevant to the variance request, for the secretary's review and consideration for approval.

(b) Each variance request shall specify why the request should be considered and how the requested variance meets the provisions of K.A.R. 28-16-160 through 28-16-173 and provides for protection of public health and the environment.

(c) A variance may be granted by the secretary if the request is in keeping with the provisions of K.A.R. 28-16-160 through 28-16-173 and the secretary determines that the requested variance will protect public health and the environment. In evaluating each variance request, site-specific conditions, which may include the depth to groundwater, the quantity of groundwater present, hydrogeologic factors, alternative technical information, and alternative designs, shall be considered by the secretary. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164 and K.S.A. 2003 Supp. 65-171d; effective May 20, 2005.)

Article 17.—DIVISION OF VITAL STATISTICS

28-17-1. Definitions. (a) "Birth certificate" means a standard certificate of live birth, a delayed certificate of birth, or a foreign-born certificate.

(b) "Certification" means the action or process that attests to the authenticity of a copy or abstract of any record or certificate pertaining to any birth, adoption, legitimation, death, stillbirth, marriage, divorce, or annulment of marriage within the state of Kansas.

(c) "Delayed certificate of birth" means documentation filed six or more months after a live birth in Kansas that substantiates the birth.

(d) "Foreign-born certificate" means documentation substantiating the birth of either of the following:

(1) An individual who meets the following conditions:

(A) The individual was born outside the United States or trust territories of the United States;

(B) neither parent of the individual was a citizen of the United States; and

(C) the individual was adopted by a Kansas resident or through a Kansas court; or

(2) an individual who was born outside the United States or trust territories of the United States, whose birth has not been registered as that of a United States citizen, and who was adopted by a Kansas resident or through a Kansas court.

(e) "Heirloom certificate" means a personalized keepsake certificate.

(f) "Medical data" means data or information that describes medical and anatomical conditions or characteristics of an individual, or both.

(g) "Personal data" means nonmedical data or information that describes the legal identity or attributes of an individual.

(h) "Registrant" means the individual named on a vital record for whom the vital record was established.

(i) "Registration," as used in the definition of "vital statistics" in K.S.A. 65-2401 and amendments thereto and in these regulations, means the process of filing an original record or certificate.

(j) "Secretary" has the meaning specified in K.S.A. 65-2401, and amendments thereto.

(k) "Standard certificate of live birth" means documentation substantiating a live birth within the state of Kansas that is filed with the state registrar within six months of the date of birth as specified in K.S.A. 65-2409, and amendments thereto.

(l) "Verification" means a search of files and records maintained by the state registrar that authenticates the information on specified vital records. (Authorized by and implementing K.S.A. 65-2401, 65-2402, and K.S.A. 2003 Supp. 65-2418; effective Jan. 1, 1966; amended Oct. 22, 1990; amended, T-28-11-5-04, Nov. 5, 2004; amended Feb. 25, 2005.)

28-17-2. (Authorized by K.S.A. 65-2404; effective Jan. 1, 1966; revoked May 1, 1986.)

28-17-3. (Authorized by K.S.A. 65-2431; effective Jan. 1, 1966; revoked Oct. 22, 1990.)

28-17-4. (Authorized by K.S.A. 65-2430; implementing K.S.A. 65-2430; effective Jan. 1,

1966; amended May 1, 1983; revoked Oct. 22, 1990.)

28-17-5. (Authorized by K.S.A. 65-2402 and implementing K.S.A. 65-2409, as amended by L. 1990, Chap. 226; effective Jan. 1, 1966; amended Oct. 22, 1990; revoked May 10, 1996.)

28-17-6. Fees for copies, abstracts, and searches. (a)(1) Subject to the requirements of K.S.A. 65-2417 and K.S.A. 65-2418 (a)(2) and amendments thereto, certified copies or abstracts of certificates or parts of certificates shall be furnished by the state registrar upon request by an authorized applicant and payment of the required fee.

(2)(A) The fees for making and certifying copies or abstracts of birth, stillbirth, marriage, and divorce certificates shall be \$12.00 for the first copy or abstract and \$7.00 for each additional copy or abstract of the same record requested at the same time.

(B) The fees for making and certifying copies or abstracts of death certificates shall be \$13.00 for the first copy or abstract and \$8.00 for each additional copy or abstract of the same record requested at the same time.

(b) For any search or verification of the files and records for birth, stillbirth, marriage, or divorce certificates if no certified copy or abstract is made, the fee shall be \$12.00 for each five-year period for which a search is requested, or for each fractional part of a five-year period. For any search or verification of files and records for death certificates if no certified copy or abstract is made, the fee shall be \$13.00 for each five-year period for which a search is requested, or for each fractional part of a five-year period.

(c) For any search of the files necessary for preparing an amendment to a birth, stillbirth, marriage, or divorce certificate or abstract already on file, the fee shall be \$12.00. For any search of the files necessary for preparing an amendment to a death certificate or abstract already on file, the fee shall be \$13.00.

(d) For non-certified copies or abstracts of certificates or parts of certificates requested for statistical research purposes, the following fees shall be charged:

(1)(A) \$7.00 for each copy of a birth, marriage, divorce, or stillbirth certificate, if the state certificate number is provided; and

(B) \$12.00 for each copy of a birth, marriage,

divorce, or stillbirth certificate, if the state certificate number is not provided; and

(2)(A) \$8.00 for each copy of a death certificate, if the state certificate number is provided; and

(B) \$13.00 for each copy of a death certificate, if the state certificate number is not provided.

(e) For each certified copy of an heirloom certificate, the fee shall not exceed \$40.00. (Authorized by K.S.A. 2003 Supp. 65-2418; implementing K.S.A. 2003 Supp. 23-110, K.S.A. 65-2417, K.S.A. 2003 Supp. 65-2418 and K.S.A. 65-2422d, as amended by L. 2004, ch. 138, sec. 1; effective Jan. 1, 1966; amended Jan. 1, 1968; amended, E-78-18, July 7, 1977; amended May 1, 1978; amended May 1, 1983; amended, T-84-13, July 1, 1983; amended May 1, 1984; amended May 1, 1988; amended Oct. 7, 1991; amended, T-28-9-25-92, Sept. 25, 1992; amended Nov. 16, 1992; amended Aug. 16, 1993; amended, T-28-7-2-01, July 2, 2001; amended Oct. 12, 2001; amended, T-28-6-27-02, July 1, 2002; amended Oct. 18, 2002; amended, T-28-7-1-03, July 1, 2003; amended Oct. 17, 2003; amended, T-28-11-5-04, Nov. 5, 2004; amended Feb. 25, 2005.)

28-17-7. (Authorized by K.S.A. 65-2402, implementing K.S.A. 65-2422, effective Jan. 1, 1966; amended May 1, 1986; amended May 1, 1987; revoked Oct. 22, 1990.)

28-17-8. (Authorized by K.S.A. 65-2402; implementing 65-2419; effective Jan. 1, 1966; amended May 1, 1986; revoked May 10, 1996.)

28-17-9. Approval of application for delayed birth certificate. Each application for a delayed birth certificate, including completed forms, as required, and documentary evidence, shall be examined, abstracted, and filed or rejected only in the office of vital statistics of the department. (Authorized by K.S.A. 65-2402; implementing 65-2420; effective Jan. 1, 1966; amended May 1, 1986.)

28-17-10. Application form requirements for registration of delayed birth certificate. Requirements for registration of a delayed birth certificate shall be the following: The delayed birth certificate shall be filled out giving facts as at the time of birth, signed before a notary public, or person duly authorized to administer oath, by the registrant if over 18 years of age. If under age 18, the delayed certificate shall be signed by the parent, older relative or attending

physician. The delayed birth certificate shall be supported by the following evidence:

(1) Two original documents or certified or photostatic copies of original documents executed at least five years prior to date of application for delayed birth certificate which show date of birth or age, birthplace and parents' names, (except that documentary evidence may be waived in cases where the registrant is under 12 years of age at the time application is made.)

Plus

(2) At least two affidavits sworn by two of the following: Attending physician, midwife, parent, householder or other older relatives attesting to the facts of the birth as alleged on the delayed birth certificate: *Provided*, That additional documentary evidence may be substituted for one or both affidavits whenever the latter are unobtainable. The affiants in all cases must be at least five years older than the registrant. (Authorized by K.S.A. 65-2402, 65-2419, 65-2420; effective Jan. 1, 1966.)

28-17-11. Disposition of supporting documents for delayed birth certificate registration. All supporting evidence or affidavits will be examined and abstracted by the state registrar or his deputy on the face of the certificate, and the evidence, or original or certified copies will be returned to the registrant. (Authorized by K.S.A. 65-2419, 65-2420; effective Jan. 1, 1966.)

28-17-12. Delayed birth certificate filing fee. Each application for a delayed birth certificate shall be accompanied by a fee in the amount of \$10.00 for the filing and registration of the delayed birth certificate. A certified copy may be issued in accordance with K.A.R. 28-17-6 and any amendments to that rule and regulation. (Authorized by and implementing K.S.A. 65-2420; effective Jan. 1, 1966; amended Jan. 1, 1968; amended May 1, 1983; amended Oct. 22, 1990; amended Oct. 7, 1991; amended, T-28-9-25-92, Sept. 25, 1992; amended Nov. 16, 1992.)

28-17-13. Maternity home, clinic and hospital reports. Each person in charge of a maternity home, clinic or hospital shall report to the department on or before the fifth day of each month a complete list of births and stillbirths that occurred in the institution during the preceding calendar month. The list shall include the child's name and date of birth, and the name of the attending physician and shall be submitted on a

form provided by the department. (Authorized by K.S.A. 65-2402; implementing K.S.A. 65-2425; effective Jan. 1, 1966; amended May 1, 1986.)

28-17-14. Required records of institutions. It shall be the duty of the state registrar, or his duly authorized agents, to inspect the records of all hospitals and other institutions, both public and private, as often as in the judgment of the state registrar it may be necessary to do so.

All hospitals and institutions shall keep a record of personal particulars and data concerning each person admitted or confined to such hospital or other institution. This record shall include such information as required by the standard certificate of birth, death, and stillbirth forms issued under the provisions of this act. The record shall be made at the time of admission from information provided by such person, but when it cannot be so obtained, the same shall be obtained from relatives or other persons acquainted with the facts. The name and address of the person providing the information shall be a part of the record. (Authorized by K.S.A. 65-2402, 65-2425; effective Jan. 1, 1966.)

28-17-15. State registrar to prescribe forms. All paper or electronic forms used in registering, recording, and preserving the records shall be prescribed by the department. Each local registration officer shall accept and use only forms prescribed by the state registrar and shall issue out-of-state transit permits only when the proper forms are used and completed. (Authorized by K.S.A. 65-2402; implementing K.S.A. 65-2415; effective Jan. 1, 1966; amended May 1, 1986; amended Oct. 22, 1990; amended, T-28-4-25-00, April 25, 2000; amended Aug. 4, 2000.)

28-17-16. Funeral directors reports. Each funeral director shall submit to the department, on or before the fifth day of each month, a report regarding each body prepared for burial by that establishment during the preceding calendar month. The report shall list:

- (a) the name of the deceased;
- (b) the date of death; and
- (c) the place of death. (Authorized by K.S.A. 65-2402; implementing 65-2429; effective Jan. 1, 1966; amended May 1, 1986.)

28-17-17. (Authorized by K.S.A. 65-2402, 65-2426; effective Jan. 1, 1966; revoked May 1, 1983.)

28-17-18. Divorce or annulment become final. For the purpose only of determining on what date a clerk of a district court should submit a report of divorce or annulment of marriage, a divorce or annulment decree is final on the date the judgment is rendered by the district judge, unless appealed within ten (10) days from that date. (Authorized by K.S.A. 65-2402, 65-2433; effective Jan. 1, 1966.)

28-17-19. Unattended births. Additional information for each unattended birth shall be submitted to the office of vital statistics for inclusion on the original birth certificate within 90 days of the date the birth certificate is filed with the office of vital statistics. If an unattended birth is not registered within six months of the date of birth, a delayed birth certificate shall be filed in accordance with K.S.A. 65-2419 and K.S.A. 65-2420, K.A.R. 28-17-8, K.A.R. 28-17-9, K.A.R. 28-17-10, K.A.R. 28-17-11 and K.A.R. 28-17-12. (Authorized by K.S.A. 65-2402; implementing K.S.A. 65-2410, as amended by L. 1990, Chap. 226; effective Jan. 1, 1966; amended May 1, 1987; amended Oct. 22, 1990.)

28-17-20. Corrections to certificates and records. Corrections to certificates and records may be made only as follows and only within the time limit indicated in each subsection.

(a) Amendments within 90 days.

(1) Within 90 days of receipt of an original vital record in the office of vital statistics, the following records in which an inaccuracy or an incomplete item is apparent on the face of the certificate may be changed to show the accurate and complete facts:

- (A) Birth certificates;
- (B) any part of a death certificate other than the section describing the cause of death;
- (C) any part of a stillbirth certificate, other than the section describing the cause of death;
- (D) marriage certificates; and
- (E) divorce certificates.

(2) The changes specified in this subsection shall be made as follows:

(A) Any death or stillbirth certificate may be amended by drawing a single line through the incorrect information in the appropriate space or by inserting the correct information in the appropriate space, if left blank on the original certificate. For each amendment, the date of the amendment and the word "amended" shall be written or typed on the certificate. The process of amendment

specified in this paragraph shall not be used more than one time for the same item.

(B) A new certificate shall be created if any item to be corrected is not left blank on the original certificate or if a death or stillbirth certificate item has already been amended. This process of amendment shall not be used more than one time for the same item unless accompanied by a court order, except when amending a death or stillbirth certificate.

(C) If the registrant is a minor, the birth certificate may be amended at the request of a parent to change an item or items by adding the name of a parent, correcting the name of either parent or of the child, or changing the child's last name to that of either parent. Any of these amendments may be made only pursuant to K.S.A. 38-1130, and amendments thereto.

(D) The process of amendment specified in paragraph (a)(2) shall be used when affidavits and supporting evidence have been furnished to the state registrar, as appropriate. The date of the amendment and the word "amended" shall be placed on the original certificate or the newly created certificate.

(3) An amendment fee shall be required, except when changes are made within the first 90 days after receipt of a death certificate or a stillbirth certificate in the office of vital statistics.

(b) Amendments after 90 days. After 90 days of receipt of the vital record in the office of vital statistics, amendments may be made only as follows:

(1) Birth certificates.

(A) Birth certificate items may be amended upon the applicant's submission of at least two documents that consistently substantiate each item to be amended and that are executed and dated at least five years before the request for the amendment or before the tenth birthday anniversary of the registrant, except that the following items may be corrected only as specified:

(i) The items recording the registrant's sex may be amended if the amendment is substantiated with the applicant's affidavit, or a parent's affidavit if the registrant is under the age of 18, that the sex was incorrectly recorded, or with a medical certificate substantiating that a physiological or anatomical change occurred.

(ii) If the registrant is a minor, any request by a parent to change an item or items by adding the name of a parent, correcting the name of either parent or of the child, or changing the child's last

name to that of either parent shall be made only pursuant to K.S.A. 38-1130, and amendments thereto.

(iii) Any registrant who is of legal age may amend the order of the registrant's given names if the amendment is substantiated with one of the documents specified in paragraph (b)(1)(A).

(iv) A registrant who is of legal age may place the registrant's given name or names on the record only if there is no given name on the original certificate and if the amendment is substantiated with one of the documents specified in paragraph (b)(1)(A).

(v) A registrant who is of legal age may correct the registrant's given name or names if the amendment is substantiated with one document established before the tenth birthday anniversary of the registrant.

(vi) A registrant who is of legal age may correct the spelling of the registrant's last name if the amendment is substantiated with two documents established before the tenth birthday anniversary of the registrant. Changing the last name of the registrant shall not be deemed to be correcting the spelling of the registrant's last name.

(vii) A registrant who is of legal age may correct the name of the registrant's mother before her first marriage or the father's or mother's legal name, if one of the required documents specified in paragraph (b)(1)(A) is the marriage license or birth certificate of the parent or parents.

(viii) The registrant's birth date on the certificate may be changed only if both required documents were executed and dated before the tenth birthday anniversary and if the change is consistent with the recorded filing date.

(B) When an amendment is made after 90 days, any item that has been previously amended may be changed only pursuant to a court order.

(C) The sufficiency of affidavits and supporting evidence shall be determined by the state registrar.

(D) Requests for an amendment to a birth certificate that do not require a court order shall be submitted by the parent or legal guardian of persons not of legal age, or by the registrant if of legal age. The person submitting the application shall execute a notarized affidavit stating the true facts to be recorded.

(2) Death certificates: personal data.

(A) Personal data may be amended without a court order if the request is made within the first six months after filing the original certificate.

(B) Requests for amendments to personal data may be made only by the funeral director or person acting as such who submitted the original certificate.

(C) When amendments to the personal data of a death certificate are made 90 or more days after the certificate is received in the office of vital statistics, the original certificate shall remain on file unchanged and shall be placed in a sealed file to be opened only by a court order. A new certificate shall be prepared by the funeral director or person acting as such or by the state registrar. The medical section shall again be completed, and the required signatures shall be secured whenever possible. The signatures may be typed if the required signatures are unattainable and a written statement of the reason is attached to the certificate. The certificate shall not be accepted if the stated reason for the typed signature is inadequate, as determined by the state registrar. Upon acceptance by the state registrar, the new certificate shall be marked "amended" and shall indicate the date of the amendment.

(3) Stillbirth certificates: personal data.

(A) Personal data may be amended upon the request of a parent and the submission of affidavits and supporting evidence to substantiate each item to be amended.

(B) Any item that was previously amended may be changed only pursuant to a court order.

(C) The sufficiency of affidavits and supporting evidence shall be determined by the state registrar.

(4) Marriage certificates: personal data.

(A) Personal data may be amended upon the request of the bride and groom and the submission of affidavits and supporting evidence to substantiate each item to be amended.

(B) Any item that was previously amended may be changed only pursuant to a court order.

(C) The sufficiency of affidavits and supporting evidence shall be determined by the state registrar.

(5) Divorce certificates: personal data.

(A) Personal data may be amended upon the request of either spouse and the submission of affidavits and supporting evidence to substantiate each item to be amended.

(B) Any item that was previously amended may be changed only pursuant to a court order.

(C) The sufficiency of affidavits and supporting evidence shall be determined by the state registrar.

(6) Original and amended certificates. If a new certificate is created to amend and replace an original certificate, the original certificate shall remain unchanged and shall be placed in a sealed file to be opened only by a court order. The new certificate shall be marked "amended." The date of amendment shall be recorded on the new certificate. If a section of an original certificate contains a signature, the new certificate shall include the typed name of each person who signed the original certificate. The original certificate and any required affidavits shall be permanently filed by the state registrar.

(c) Amendments with no time limit.

(1) Death and stillbirth certificates: medical section data.

(A) Requests for amendments to the medical section data may be made only by the attending physician who signed the medical section on the original certificate or by the coroner in whose jurisdiction the death or stillbirth occurred.

(B) An amendment may be made to the medical section data at any time.

(C) Amendments to the medical section data may be made in either of the following ways:

(i) The original certificate shall remain on file unchanged, and the written statement or affidavit of the certifying physician or coroner shall be appended to the back of the original certificate. The original certificate shall be marked "amended" and shall indicate the date of the amendment.

(ii) A certifying physician or coroner may request the establishment of a new death certificate or stillbirth certificate if erroneous data has been entered in the medical section. In this case, the funeral director or person acting as such shall enter the personal data and forward the certificate to the certifying physician or coroner to sign the medical section. When all items have been completed, the new certificate shall be submitted to the office of vital statistics, and upon acceptance of the certificate, the certificate shall be marked "amended" and shall indicate the date of the amendment. The original death or stillbirth certificate shall be placed in a sealed file to be opened only by a court order. (Authorized by K.S.A. 65-2402 and 65-2422c; implementing K.S.A. 65-2422c; effective Jan. 1, 1966; amended May 1, 1987; amended May 1, 1988; amended Oct. 22, 1990; amended, T-28-9-25-92, Sept. 25, 1992; amended Nov. 16, 1992; amended Aug. 16, 1993; amended, T-28-11-5-04, Nov. 5, 2004; amended Feb. 25, 2005.)

28-17-21. Dissemination of certain information to state and federal agencies. Certain information extracted from death records may be released to state and federal agencies in the form of a computer data tape to include name of deceased, date of death, date of birth, county of residence, and social security number. This information shall be released on an annual basis upon written request. The written request shall include: a statement as to how the information shall be used; a statement of confidentiality assuring the information shall be used for the agreed upon purpose only; and assurance that no contact shall be made based upon information obtained. The information shall be disseminated to the requestor in a standard format to be determined by the department. The state registrar shall determine the fee to be charged for the data tape based on costs for providing those services and shall prescribe the manner in which those costs are to be paid. (Authorized by K.S.A. 65-2402; implementing K.S.A. 65-2422, as amended by L. 1987, Ch. 241, Sec. 1; effective May 1, 1988.)

28-17-22. Enforcement of uniform vital statistics act. Each violation of K.S.A. 65-2401 et seq., and amendments thereto, and these regulations shall, upon discovery of the violation, be reported to the state registrar. Each reported case involving any such violation shall then be reported by the state registrar to the county attorney, the district attorney, or the official acting in that capacity for prosecution, as specified in K.S.A. 65-2434 and amendments thereto. (Authorized by and implementing K.S.A. 65-2402, 65-2406, and 65-2434; effective, T-28-11-5-04, Nov. 5, 2004; effective Feb. 25, 2005.)

Article 18.—ANIMAL AND RELATED WASTE CONTROL

28-18-1. Definitions. The following terms and abbreviations shall have the following meanings, unless otherwise defined in an individual regulation or unless a different meaning is clear from the context in which it is used. Terms and abbreviations not provided in this article shall have the meanings specified in K.S.A. 65-101 et seq. and amendments thereto; articles 5, 16, 18a, and 30; or the clean water act (CWA). If the same word is defined both in Kansas statutes or the regulations of this article and in any federal regulation adopted by reference in these regulations or in state regulations referenced in this article and

the definitions are not identical, the definition prescribed in Kansas statutes or the regulations of this article shall control.

(a) “Animal unit” has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(b) “Animal unit capacity” has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(c) “Animal waste management system” means any land, structures, or practices utilized for the collection, containment, storage, distribution, land application, or disposal of animal or other process wastes generated by confined feeding operations. This term shall include any of the following:

(1) Site grading to divert extraneous, uncontaminated precipitation runoff around the confined feeding facility;

(2) structures designed and constructed to collect, control the flow of, and direct animal or other process wastes;

(3) vegetation cover utilized for controlling erosion or for filtering animal or other process wastes;

(4) tanks, manure pits, or other structures designed and constructed to collect or store animal or other process wastes;

(5) waste-retention lagoons or ponds;

(6) land used for the application, utilization, or disposal of animal or other process wastes; and

(7) waste treatment facilities.

(d) “Certification” means a document issued by the secretary in lieu of a water pollution control permit, indicating that the facility meets applicable animal waste management statutes and regulations and does not represent a significant water pollution potential.

(e) “Change in operation” and “modification” mean any of the following:

(1) Expansion or enlargement of a facility beyond the scope or boundaries established by registration, permit, certification, or approved plans and specifications;

(2) any increase in the animal unit capacity beyond that authorized by a permit or certification; or

(3) a change in construction or operation of a confined feeding facility that affects the collecting, storage, handling, treatment, utilization, or disposal of animal or other process wastes.

(f) “Clean water act” and “CWA” mean the federal water pollution control act, 33 U.S.C. 1251 et seq., as in effect on November 27, 2002.

(g) “Closure plan” means a written document

that identifies the practices and procedures that the operator of a confined feeding facility plans to use when closing the facility or any part of the facility.

(h) “Confined feeding facility” has the meaning specified in K.S.A. 65-171d and amendments thereto.

(i) “Department” and “KDHE” mean the Kansas department of health and environment.

(j) “Director” means the director of the division of environment of the Kansas department of health and environment.

(k) “Division” means the division of environment, Kansas department of health and environment.

(l) “Entity,” for the purposes of these regulations, means a person, individual, association, company, corporation, institution, group of individuals, joint venture, partnership, or federal, state, county, or municipal agency or department.

(m) “Environmental protection agency” and “EPA” mean the United States environmental protection agency.

(n) “Equus Beds,” for the purposes of these regulations, means an aquifer underlying the sections of land listed in the following table:

County	Range	Township	Section
Harvey	01W	22S	06, 07, 18, 19, 30, 31
Harvey	01W	23S	06, 07, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	01W	24S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	02W	22S	All sections
Harvey	02W	23S	All sections
Harvey	02W	24S	All sections
Harvey	03W	22S	All sections
Harvey	03W	23S	All sections
Harvey	03W	24S	All sections
McPherson	01W	19S	31, 32, 33, 34, 35
McPherson	01W	20S	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33
McPherson	01W	21S	05, 06, 07, 18, 19, 30, 31
McPherson	02W	21S	12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
McPherson	03W	18S	28, 29, 30, 31, 32, 33
McPherson	03W	19S	04, 05, 06, 07, 08, 09, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
McPherson	03W	20S	01, 02, 03, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, 36
McPherson	04W	18S	20, 21, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36
McPherson	04W	19S	01, 02, 03, 04, 09, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
McPherson	04W	20S	01, 02, 03, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, 36
McPherson	04W	21S	01, 02, 03, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
Reno	04W	22S	All sections
Reno	04W	23S	All sections
Reno	04W	24S	All sections
Reno	04W	25S	All sections
Reno	04W	26S	All sections
Reno	05W	22S	All sections
Reno	05W	23S	All sections
Reno	05W	24S	All sections
Reno	05W	25S	All sections
Reno	05W	26S	All sections
Reno	06W	22S	All sections
Reno	06W	23S	All sections
Reno	06W	24S	All sections
Reno	06W	25S	All sections
Reno	06W	26S	All sections
Reno	07W	22S	All sections
Reno	07W	23S	All sections
Reno	07W	24S	All sections
Reno	07W	25S	All sections
Reno	07W	26S	All sections
Sedgwick	01E	26S	06, 07, 08, 17, 18, 19, 20
Sedgwick	01W	25S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
Sedgwick	01W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 05, 06
Sedgwick	01W	27S	05, 06
Sedgwick	02W	25S	All sections
Sedgwick	02W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 34, 35, 36

County	Range	Township	Section
Sedgwick	02W	27S	01
Sedgwick	03W	25S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36
Sedgwick	03W	26S	01, 02, 03, 04, 11, 12

(o) "Federal permit," "national pollutant discharge elimination system permit," and "NPDES permit" mean an authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of 40 C.F.R. Parts 122, 123, 124, and 412.

(p) "Food animals" means animals, fish, or fowl produced for consumption.

(q) "Fur animals" means animals raised for the skin, pelt, or fur.

(r) "Groundwater," as used in this article, means water located under the surface of the land that is or can be the source of supply for wells, springs, seeps, or streams, or that is held in aquifers. For the purposes of this article, groundwater shall be considered capable of being a source of supply for wells if at least one of the following conditions is met:

(1) The groundwater can be produced at a rate of 10 gallons or more per hour from a borehole with a diameter of nine or fewer inches. In determining the groundwater production rate for an excavation, borehole, or existing water or monitoring well, the quantity of produced water shall be adjusted for comparison purposes to the surface area of a borehole with a diameter of nine inches.

(2) The groundwater is currently being used within ½ mile of the proposed lagoon, regardless of the rate at which the groundwater can be produced.

(3) There is evidence of past groundwater use within ½ mile of the proposed lagoon.

(s) "Habitable structure" has the meaning specified in K.S.A. Supp. 65-171d, and amendments thereto.

(t) "Impermeable synthetic membrane liner" means a commercially manufactured membrane liner composed of synthetic materials commonly identified as being plastic, plastic polymer, or other synthetic materials that, when installed, provide for the more stringent of either of the following:

(1) A maximum monitored or calculated seepage rate of 1/64 inch per day; or

(2) the liner manufacturer's criteria for the maximum monitored or calculated seepage rate for the installed membrane liner, expressed in units of volume per unit area per unit of time (gallons per square foot per day).

(u) "Land application" means the distribution of animal or other process wastes onto, or incorporation into, the soil mantle for the purpose of disposal or utilization by crops or vegetation.

(v) "Liner" means any designed barrier in the form of in situ, layer, membrane, or blanket materials utilized or installed to reduce the potential for a significant hydrologic connection between animal or other process wastes that are controlled or retained by animal waste management systems and waters of the state.

(w) "Maximum soil liner seepage rate" and "specific discharge" mean the flow rate of water through the liner of a waste-retention lagoon or pond and shall be expressed as velocity (distance/time). The maximum seepage rate shall be calculated as $v = k(h/d)$, in which "k" is the hydraulic conductivity (coefficient of permeability) and "(h/d)" is the hydraulic gradient. The hydraulic gradient is the maximum vertical distance "h" measured from the liquid surface to the liner bottom, divided by the thickness of the soil liner "d." When calculating the maximum seepage rate, the maximum design depth, not considering design freeboard, shall be used.

(x) "Minimum standards of design, construction, and maintenance" means the following:

- (1) Effluent standards and limitations;
- (2) other performance standards for treatment or utilization; and
- (3) other standards of design, construction, and maintenance for confined feeding facilities or animal waste management systems, published by the KDHE.

(y) "Monitoring" means all procedures using any of the following methods:

(1) Either systematic inspection or collection and analysis of data on the operational parameters of a confined feeding facility or an animal waste management system; or

(2) the systematic collection and analysis of data on the quality of the animal or other process wastes, groundwater, surface water, or soils on or in the vicinity of the confined feeding facility or animal waste management system.

(z) "National pollutant discharge elimination system" and "NPDES" mean the national system for the issuance of permits under 33 U.S.C. sec-

tion 1342, and shall include any state or interstate program that has been approved by the EPA administrator, in whole or in part, pursuant to 33 U.S.C. section 1342.

(aa) "Nutrient management plan" means a written document that identifies the practices and procedures that the operator of a confined feeding facility that is required to obtain a federal permit plans to use to operate and maintain the animal waste management system and to manage the handling, storage, utilization, and disposal of wastes generated by the facility.

(bb) "Oil or gas well" shall have the meaning assigned to the term "well" in K.S.A. 55-150, and amendments thereto.

(cc) "Operator" means an individual, association, company, corporation, municipality, group of individuals, joint venture, partnership, a state or federal agency or department, or any business owning, leasing, or having charge or control of one or more confined feeding facilities.

(dd) "Pleasure animals" means dogs, cats, rabbits, horses, and exotic animals.

(ee) "Point source" has the meaning specified in K.A.R. 28-16-28b.

(ff) "Pollution" has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(gg) "Precipitation runoff" means the rainwater or the meltwater that is derived from snow, hail, sleet, or other forms of atmospheric precipitation and that flows by gravity over the surface of the land.

(hh) (1) "Process wastes" means any of the following:

(A) Excrement from animals, wastewater, and animal carcasses;

(B) precipitation that comes into contact with any manure, litter, bedding, or other raw, intermediate, or final material or product used in or resulting from the production of animals or direct products, including meat, milk, and eggs;

(C) spillage or overflow from animal or poultry watering systems;

(D) wastes from washing, cleaning, or flushing pens, barns, manure pits, equipment, trucks, trailers, milking parlors, milking equipment, and other associated animal facilities;

(E) wastes from washing animals or spraying animals for cooling;

(F) wastes from dust control;

(G) boiler blowdown and water softener regenerate wastes;

(H) precipitation runoff from confinement, loading, and unloading areas;

(I) spillage of feed, molasses, animal wastes, or any other process wastes described in this regulation;

(J) discharges from land application fields that occur during application;

(K) precipitation runoff from land application fields, if liquid or concentrated liquid wastes are applied during frozen, snow-covered, or saturated soil conditions without approval by the department;

(L) raw, intermediate, or finished materials associated with wastes or contaminated storm water runoff from animal waste or dead animal composting operations;

(M) silo liquors; or

(N) flows or runoff from waste storage areas.

(2) Process wastes shall not include animal wastes spilled by trucks transporting livestock on city, township, county, state, or federal streets, roads, or highways.

(ii) "Public livestock market" has the meaning specified in K.S.A. 47-1001, and amendments thereto. For the purposes of these regulations, this term shall include public livestock markets where federal veterinary inspections are regularly conducted.

(jj) "Registration" means any required fee and the properly completed and executed documents designated by the division and any additional required documents or information necessary for determining the need for a water pollution control permit.

(kk) "Salt solution mining well" has the meaning specified in K.S.A. 55-1,120, and amendments thereto.

(ll) "Secretary" means the secretary of the Kansas department of health and environment.

(mm)(1) "Sensitive groundwater areas," for the purpose of these regulations, means aquifers generally comprised of alluvial aquifers, the area within the boundaries of the Equus Beds groundwater management district no. 2 (GMD #2), and the dune sand area located south of the great bend of the Arkansas River. Each sensitive groundwater area shall be any section of land listed in "Kansas sensitive groundwater areas for wastewater lagoons," prepared by KDHE and dated January 1, 2005, which is adopted by reference in K.A.R. 28-16-160.

(2) Any operator proposing a new animal waste-retention lagoon or expansion of an existing ani-

mal waste-retention lagoon may request that the director make a site-specific sensitive groundwater area determination. The request shall be made in writing to the director. The request shall contain supporting data and information and an explanation of why the area in question should not be considered to be a sensitive groundwater area, for the purpose of these regulations.

(nn) "Sewage" has the meaning specified in K.S.A. 65-164, and amendments thereto.

(oo) "Significant water pollution potential" means any of the following, as determined by the secretary:

(1) A livestock or animal feeding operation that utilizes structures designed and constructed to collect, control the flow of, and direct animal or other process wastes, tanks, manure pits, or other structures designed and constructed to collect or store animal or other process wastes, waste-retention lagoons or ponds, or waste treatment facility or facilities;

(2) lots, pens, or concentrated feeding areas with creeks, streams, intermittent waterways, or any other conveying channel or device that has the potential to carry pollutants to waters of the state running through or proximate to the lots, pens, or concentrated feeding areas;

(3) any operation that cannot retain or control animal or other process wastes on the operator's facility or property or adjacent property without the owner's permission; or

(4) a livestock or animal feeding operation that has been determined to practice improper collection, handling, or disposal of animal or other process wastes that have the potential to degrade or impair the quality of any waters of the state.

(pp) "Surface waters," for water quality purposes, has the meaning specified in K.A.R. 28-16-28b.

(qq) "Truck-washing facility for animal wastes" means a truck-washing facility that exists solely for the purpose of washing animal wastes from trucks or trailers.

(rr) "Variance" means the secretary's written approval or permit authorizing a proposed action that knowingly results in a lack of conformity with one or more provisions of these regulations or the minimum standards of design, construction, and maintenance. Each variance authorized by the secretary shall be deemed to protect public health and the environment and to comply with the intent of these regulations and with federal NPDES permit requirements.

(ss) "Waste management plan" means a written document that identifies the practices and procedures that the operator of a confined feeding facility not required to obtain a federal permit plans to use to operate and maintain the animal waste management system and to manage the handling, storage, utilization, and disposal of wastes generated by the facility.

(tt) "Waste-retention lagoon or pond" means excavated or diked structures, or natural depressions provided for or used for the purpose of containing or detaining animal or other process wastes. Discharges from waste-retention lagoons or ponds shall not be allowed, except as authorized by a water pollution control permit.

(uu) "Waste treatment facilities" means structures or devices that collect, store, stabilize, treat, or otherwise control pollutants, so that after the discharge, disposal, or land application of treated wastes, water pollution will not occur, and public health and the waters of the state will be protected.

(vv) "Water pollution control permit" and "permit" mean an authorization, license, or equivalent control document issued by the secretary. This term shall not include any document that has not yet been the subject of final action by the secretary.

(ww) "Water quality standards" means the Kansas surface water quality standards as specified in K.A.R. 28-16-28b through K.A.R. 28-16-28g.

(xx) "Water well" has the meaning specified in K.S.A. 82a-1203, and amendments thereto.

(yy) "Waters of the state" has the meaning specified in K.S.A. 65-161, and amendments thereto.

(zz) "Whole pond seepage test" means a measurement of the evaporation from, and the change in water level of the waste-retention lagoon, pond, or structure, or swine waste-retention lagoon, pond, or structure using either of the following:

(1) Any method that meets the requirements specified in "standards for measuring seepage from anaerobic lagoons and manure storages," by Jay M. Ham, Ph.D. and Tom M. DeSutter, dated 2003 and hereby adopted by reference; or

(2) any equivalent method approved by the secretary. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 65-171a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective, E-67-5, May 31, 1967; effective Jan. 1, 1968; amended Jan. 15, 1999; amended March 16, 2007.)

28-18-2. Registration and application requirements. (a) Each entity proposing the construction, modification, or expansion of an unregistered confined feeding facility, public livestock market, collection center, or transfer station and each operator of an existing, but unregistered, confined feeding facility, public livestock market, collection center, or transfer station shall submit a registration form for the facility to the secretary, if any of the following conditions is met:

(1) The proposed or existing unregistered facility has an animal unit capacity of 300 or more animal units.

(2) The proposed or existing unregistered facility presents a significant water pollution potential, as defined in K.A.R. 28-18-1.

(3) The proposed or existing unregistered facility is required by statute to obtain a permit from the secretary.

(4) The entity proposing the construction, modification, or expansion of an unregistered facility or the operator of an existing unregistered facility elects to register the facility in order to obtain either a permit or certification, even though there is no requirement to obtain a permit or certification.

(b) Each entity or operator that submits a registration form to the department shall include the required \$25 fee.

(c) Each entity proposing the construction, modification, or expansion of a confined feeding facility, a public livestock market, a collection center, a transfer station, or a truck-washing facility for animal waste and each operator of an unpermitted confined feeding facility, public livestock market, collection center, transfer station, or truck-washing facility for animal waste shall submit to the secretary a permit application for the facility if any of the following conditions is met:

(1) The proposed facility or existing unpermitted facility presents a significant water pollution potential, as defined in K.A.R. 28-18-1.

(2) The proposed facility or existing unpermitted facility is required by statute to obtain a permit.

(3) The entity proposing the construction, modification, or expansion of the facility or the operator of an existing unpermitted facility elects to obtain a permit, even though a permit is not required.

(d) Each entity or operator that submits a permit application to the department shall include the permit fee required by K.A.R. 28-16-56d.

(e) The animal unit capacity of a confined feeding facility using an animal waste management system, for species other than those included in the definition of animal unit, shall be determined by the secretary on a case-by-case basis. The quantity or concentration of animal waste produced by the species in comparison to those species addressed in the animal unit definition shall be the factor used by the secretary in determining the animal unit capacity.

(f) Each entity or operator proposing the construction, modification, or expansion of a confined feeding facility and each operator of an unpermitted confined feeding facility required by statute or regulation to obtain a federal permit shall apply to the secretary for a federal permit.

(g) Each entity or operator that is proposing the construction, modification, or expansion of a confined feeding facility, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes and that is required to obtain a permit or certification shall obtain a permit or certification from the secretary before initiating operation of the facility. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective, E-67-5, May 31, 1967; effective Jan. 1, 1968; amended Jan. 15, 1999; amended March 16, 2007.)

28-18-3. Separation distance requirements. (a) Separation distances between confined feeding facilities and any habitable structure shall conform to the provisions and requirements of K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and amendments thereto.

(b) The operator shall provide to the department any information required to ascertain the distance to the nearest habitable structure or determine which habitable structure is the nearest to the proposed or existing confined feeding facility.

(c) When the animal unit capacity of a confined feeding facility is comprised of swine, in addition to other animals or fowl, the swine-specific separation distance requirements related to any habitable structure, wildlife refuge, or city, county, state or federal park shall be applied only to the animal unit capacity of the swine facility operation. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997

Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective, E-67-5, May 31, 1967; effective Jan. 1, 1968; amended Jan. 15, 1999.)

28-18-4. Filing of applications and payment of fees. (a) Each application shall be filed according to K.A.R. 28-16-59.

(b) For the purpose of providing adequate public notice regarding a permit for any proposed new construction or proposed new expansion of a confined feeding facility, a public livestock market, a collection center, a transfer station, or a truck-washing facility for animal wastes, each applicant shall provide to the secretary the name or names and mailing address or addresses of the following:

(1) The United States post office or offices serving the immediate area of the confined feeding facility; and

(2) each owner of a habitable structure or any property located within one mile of the confined feeding facility.

(c) In addition to the application requirements of K.A.R. 28-16-59, for any new construction or new expansion of a confined feeding facility, each applicant shall submit all of the following information:

(1) A map identifying the location and layout of the confined feeding facility or the facility perimeter;

(2) a map identifying the location of any habitable structure or city, county, state, or federal park within one mile of the confined feeding facility or the facility perimeter;

(3) a map identifying all water wells on the facility property;

(4) a map identifying any streams and bodies of surface water within one mile of the confined feeding facility or the facility perimeter;

(5) for confined feeding facilities that utilize a waste-retention lagoon or pond, any information that the applicant possesses indicating the presence of any unplugged oil, gas, or salt solution mining wells located at the proposed or existing confined feeding facility;

(6) a waste management plan for any confined feeding facility whose operator is not required to obtain a federal permit;

(7) a nutrient management plan for any confined feeding facility whose operator is required to obtain a federal permit;

(8) a groundwater monitoring plan, if required; and

(9) a closure plan for any confined feeding facility whose operator is required to obtain a federal permit and that is located over the Equus Beds.

(d) Confined feeding facilities on separate pieces of land without a contiguous ownership boundary shall be classified as separate operations, and each applicant shall be assessed a fee under K.A.R. 28-16-56d. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective, E-67-5, May 31, 1967; effective Jan. 1, 1968; amended Jan. 15, 1999; amended March 16, 2007.)

28-18-5. Transfer of a permit or certification. (a) The automatic transfer of a permit shall be prohibited. Each operator wanting to transfer a water pollution control permit of a confined feeding facility shall make application consistent with the provisions of the regulations in this article.

(b) The automatic transfer of a certification shall be prohibited. Each operator wanting to transfer a certification for a confined feeding facility shall register with the department, in accordance with this article.

(c) The existing permit or certification shall remain in effect until the department authorizes the transfer by letter or reissues the permit or certification. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18-6. Development of a draft permit. Development of each draft permit shall be consistent with the requirements of K.A.R. 28-16-60. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18-7. Public notice of permit actions

and public hearings. Public notice of permit actions and public hearings shall be consistent with the requirements of K.A.R. 28-16-61. Public hearings scheduled by the department shall address only those matters for which the secretary has authority. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18-8. Permit; terms and conditions.

(a) The terms and conditions of all permits shall be consistent with the requirements of K.A.R. 28-16-62, as appropriate.

(b) (1) Animal waste management systems shall be designed, constructed, operated, and maintained in a manner that prevents pollution of waters of the state.

(2) Each operator of an animal waste management system for a confined feeding facility who is required to obtain a federal permit shall ensure that the animal waste management system is designed, constructed, operated, and maintained to prevent the discharge of animal or other process wastes to surface waters of the state. Any operator of an animal waste management system of a confined feeding facility may discharge the following to surface waters of the state, whenever precipitation events, either chronic or catastrophic, cause an overflow from an animal waste management system designed, constructed, operated, and maintained to contain all animal and other process wastes:

(A) Animal or other process wastes; and

(B) the direct precipitation and the runoff from a 25-year, 24-hour precipitation event for the location of the confined feeding facility.

(3)(A) Except as provided in paragraph (b)(3)(B), each animal waste management system for any confined feeding facility whose operator is not required to obtain a federal permit shall be designed, constructed, operated, and maintained to prevent the discharge of animal or other process wastes to surface waters of the state as required in paragraph (b)(2).

(B) Any operator of an animal waste management system for a confined feeding facility who is not required to obtain a federal permit may discharge animal or other process wastes to surface waters of the state, consistent with the require-

ments of K.A.R. 28-16-28b through K.A.R. 28-16-28g, K.A.R. 28-16-57a, and K.A.R. 28-16-62, as appropriate, when specifically authorized by a permit.

(c) For each emergency or accidental discharge, overflow, or unplanned release of animal or other process wastes, each operator shall report the incident to the department within two hours of discovery. Each operator shall report any emergency, spill, accidental discharge, overflow, or unplanned release associated with animal or other process wastes to the department, using the telephone numbers provided by the director. Each operator shall submit a written report to the department within three days of the incident.

(d) Each operator shall retain a copy of the current permit issued by the secretary at the site office for the facility or at a central records location.

(e) Each operator shall be responsible for advising the department within 60 days of any changes in mailing address or telephone number regarding the facility or designated facility contact.

(f) Each operator shall operate the facility in a manner that minimizes or prevents any discharge that is in violation of the permit or that has a potential to adversely affect human health or the environment.

(g) Each operator shall, at all times, properly operate and maintain the animal waste management system and any related appurtenances that are installed or utilized by the operator to achieve compliance with the conditions of the permit. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007.)

28-18-9. Certification; terms and conditions. (a) Each operator shall comply with all conditions, requirements, limitations, and operating provisions stipulated in the certification.

(b) Operation of a confined feeding facility in violation of any conditions, requirements, limitations, and operating provisions of a certification, or in a manner that represents a significant water pollution potential, shall result in the revocation of the certification and any appropriate enforcement action. If a significant water pollution potential exists as defined in K.A.R. 28-18-1, the operator shall apply for a permit. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A.

65-164, 65-165, 65-166, K.S.A. 2003 Supp. 65-166a, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007.)

28-18-10. Permits; monitoring and reporting. (a) Any monitoring and reporting required by the department in the terms and conditions of a permit, certification, order, directive, or consent agreement shall be conducted consistent with the provisions of K.A.R. 28-16-63, as appropriate.

(b) The emergency or accidental discharge, overflow, or unplanned release of animal or other process wastes into surface waters of the state shall be reported to the department, pursuant to K.A.R. 28-16-27, within two hours of discovery. Each operator shall report any emergency, spill, accidental discharge, overflow, or unplanned release associated with animal or other process wastes to the department using telephone numbers as provided by the department. Each operator shall submit a written report to the department within three days of the incident.

(c) Any analysis required by a permit, certification, order, directive, or consent agreement of the department shall be performed in accordance with the provisions of 40 C.F.R. Part 136, as in effect on July 1, 1998, or as approved by the department.

(d) Each analysis shall be performed by a laboratory that has been certified by the department pursuant to K.S.A. 65-1711, and amendments thereto, or as approved by the department.

(e) 40 C.F.R. Part 136, as in effect on July 1, 1998, is adopted by reference. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18-11. Confined feeding facilities; federal requirements. For the purpose of issuing federal permits and administering NPDES program requirements, the following definitions and provisions, as in effect on July 1, 2006 and as amended by 72 fed. reg. 40250 on July 24, 2007, are hereby adopted by reference:

(a) The concentrated animal feeding operation exclusions specified in 40 C.F.R. 122.3 (e) and 40 C.F.R. 122.3 (f);

(b) the provisions addressing concentrated animal feeding operations specified in 40 C.F.R. 122.23(b), (c), and (e), and 122.42(e);

(c) the provisions addressing concentrated aquatic animal feeding operations specified in 40 C.F.R. 122.24 and appendix C to 40 C.F.R. Part 122; and

(d) except for 40 C.F.R. 412.32, 412.44, and 412.46, the provisions addressing effluent limitations for concentrated animal feeding operations specified in 40 C.F.R. Part 412. (Authorized by K.S.A. 2006 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, K.S.A. 65-166, K.S.A. 2006 Supp. 65-166a, K.S.A. 2006 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007; amended Jan. 4, 2008.)

28-18-12. Design and construction of animal waste management systems. (a) If a confined feeding facility represents a significant water pollution potential or if the operator of a facility is required by statute or regulation to obtain a permit, as determined by the secretary, the operator shall provide an animal waste management system that is designed in accordance with the minimum standards of design, construction, and maintenance and is constructed and operated in accordance with construction plans, specifications, and either a waste management plan or nutrient management plan approved by the secretary. If site topography, operating procedures, experience, and other available information indicate that more than the minimum standards of design, construction, and maintenance are required to effect adequate water pollution control, additional provisions may be required. Each applicant shall ensure that any new construction or new expansion of a confined feeding facility or animal waste management system meets the requirements of the "minimum standards of design, construction, and maintenance," as defined in K.A.R. 28-18-1.

(b) The operator shall not initiate operation of the new confined feeding facility or animal waste management system or the expanded portions of any existing confined feeding facility or animal waste management system, until after issuance of the new or modified permit by the secretary. Initiation of construction before the issuance of a new or modified permit by the secretary shall be deemed to be solely at the risk of the operator.

(c) For the purpose of these regulations, each reference to a professional engineer or consultant

shall be deemed to designate an individual offering a service for a fee for the design of a confined feeding facility or animal waste management system, exclusive of any nutrient utilization plan, soil or cropping consultations, hydrologic work involved in conducting hydrologic or geologic investigations, or in the siting, design, or construction of groundwater monitoring wells. Each reference to a professional engineer shall be deemed to designate an individual licensed to practice engineering in Kansas by the Kansas state board of technical professions.

(d) Consultants that prepare plans and specifications for the new construction or new expansion of confined feeding facilities that are submitted to comply with statutes and regulations shall provide KDHE with documentation that adequate general commercial liability insurance coverage addressing errors and omissions in the design plans and specifications has been obtained and is in effect.

(e) (1) Each operator shall initiate any proposed new construction or new expansion of a confined feeding facility that has been approved by the secretary and for which the required permit or permit modification has been issued, within two years after the date on which the permit or permit modification is effective or pursuant to the requirements of the permit issued by the secretary. Each operator shall complete any proposed new construction or new expansion of a confined feeding facility that has been approved by the secretary and for which the required permit or permit modification is issued, within three years after the date on which the permit or permit modification is effective or as required by the permit issued by the secretary.

(2) Failure to initiate the approved construction or expansion within two years and to complete the approved construction or expansion within three years after the effective date of the permit or permit modification shall void the secretary's approval of the construction plans, specifications, and other associated plans. If phased construction is proposed, the initiation and completion of construction shall conform to the schedule stipulated by the secretary.

(3) If the approval becomes void, the permit or permit modification shall remain in effect for the term of the permit, but the operator shall resubmit the construction plans, specifications, and other associated plans to the secretary for review and consideration for approval before initiating

the construction or expansion of a confined feeding facility.

(f) Neither the approval of construction plans, specifications, or other required plans, nor the issuance of a permit or certification by the secretary shall prohibit the secretary from taking any enforcement action if the animal waste management system fails to protect the waters of the state, meet any specified effluent criteria, or comply with state surface water quality standards. In addition, the secretary's approval of the plans or the secretary's issuance of a permit or certification shall not constitute a defense by the operator regarding violation of any statute, regulation, permit condition, or requirement.

(g) A new confined feeding facility or animal waste management system shall not be built in any stream, river, lake, reservoir, or water bodies meeting the definition of jurisdictional wetlands and consistent with the definition of "surface waters" in K.A.R. 28-16-28b.

(h) Each operator, when directed by the secretary, shall notify the department a minimum of two days before performing any soil sample collection activities or liner integrity testing.

(i) There shall be no deviation from plans and specifications submitted to and approved by the secretary, unless amended plans and specifications showing the proposed changes have been submitted to the department and approved by the secretary.

(j) Each construction plan shall indicate the location of any active, abandoned, or plugged water, oil, gas, or salt solution mining well within 600 feet of any planned location for a waste-retention lagoon or pond. If the operator is unable to confirm the exact location of any well or wells, the construction plan shall contain a note indicating the potential for the well or wells to be located in the vicinity of any proposed waste-retention lagoon or pond. Each active, abandoned, or plugged water, oil, gas, or salt solution mining well that is encountered during construction and that was not identified or located on the construction plan shall be reported to the department within 48 hours of discovery. Construction activities that would impact the well or wells or that would be in the immediate vicinity of the well or wells shall be immediately terminated until the secretary determines that the appropriate steps, including plugging the well, have been taken to protect public health and the environment.

(k) Following the completion of the proposed

construction or proposed expansion and when requested by the secretary, each operator shall certify that the animal waste management system was constructed in accordance with the plans approved by the secretary. If the operator utilized a professional engineer or consultant to monitor the construction of the animal waste management system, then the certification shall also be signed by the professional engineer or the consultant who monitored the construction or installation of the animal waste management system, including any waste-retention lagoon or pond liner. The certification shall be based on actual observations during construction and any field or laboratory data developed during or following construction. The certification shall be maintained on-site or at a central records location and made available to the department, along with any supporting information, upon request. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007.)

28-18-13. Operation of animal waste management systems. (a) Each animal waste management system shall be designed, constructed, maintained, and operated to prevent pollution of waters of the state and to protect public health and the environment.

(b) Each animal waste management system shall be operated according to the plans approved by the secretary.

(c) When a liner is installed or constructed, the operator shall maintain the liner to comply with the minimum standards of design, construction, and maintenance. When soil liners are utilized, no trees or other deep-rooted vegetation shall be allowed to grow within 100 feet of the liner. Any mechanical or structural damage to the liner shall be reported to the department within two work-days of identification and shall be repaired in a time frame approved by the secretary and designed to protect public health and the environment.

(d) Each operator shall haul or transport animal or process wastes to land application sites in a manner that prevents loss or spillage during transport.

(e) When land application of animal or other process wastes is practiced, the application shall be conducted considering site-specific conditions

to ensure the appropriate agricultural utilization of the nutrients in the animal or process wastes.

(f) Irrigation practices shall be managed to minimize ponding or puddling of animal or other process wastes at the land application site. Irrigation practices shall be managed to ensure that animal or other process wastes are not discharged from the application sites.

(g) Adequate equipment and land application areas shall be available for removal of animal or other process wastes and contaminated storm water runoff from the confined feeding facility to comply with the provisions of the permit and these regulations.

(h) (1) Unless approved in advance by the secretary, liquid waste, concentrated liquid animal waste, or other liquid process waste shall not be land-applied when the ground is frozen, snow-covered, or saturated, or during a precipitation event. Land application of animal or other process wastes during these periods may be authorized by the secretary for use in filtering animal or other process wastes from retention structures that are properly operated and maintained and that are in imminent danger of overflow to surface waters of the state due to a chronic or catastrophic precipitation event.

(2) Solid animal or other process wastes may be applied to frozen ground only if the proposed application site and practices ensure that the wastes will be retained at the application site.

(i) (1) Each operator, as required by the facility permit issued by the secretary, shall conduct sampling and analysis of animal or process wastes or sites utilized for the application of animal or process wastes from confined animal feeding facilities, to determine nutrient and salinity levels, to confirm utilization of the animal or process wastes at agronomic rates, and to ensure that public health and the environment are protected.

(2) (A) Each operator of a confined feeding facility not required to obtain a federal permit shall sample the soil of each field identified in the waste management plan for the confined feeding facility if both of the following conditions are met:

(i) The field is identified by KDHE as located in a sensitive groundwater area or over the Equus Beds.

(ii) The field has received manure or wastewater in one or more of the previous five years.

(B) The sampling and analysis shall be conducted in accordance with the procedures approved by the secretary. The test results shall be

sent to the department within 30 days of receipt of the test results.

(3) Each operator required to obtain a federal permit shall conduct soil and waste sampling and analysis in accordance with the nutrient management plan. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007.)

28-18-14. Inspections. (a) Each operator shall provide all necessary specialized equipment, clothing, or appurtenances to enable a department inspector to enter the facility for inspection.

(b) Each operator that develops or modifies biosecurity protocols and that requests KDHE conformance with the protocols shall submit a copy of the protocols to the department within 30 days of establishing or modifying the biosecurity protocols.

(c) If any department inspector conducting an inspection of a confined feeding facility complies with the facility's biosecurity protocol, that inspector shall be allowed to access the animal waste management system to conduct inspections. Biosecurity protocols shall not restrict the reasonable access of any department inspector. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective Jan. 15, 1999; amended March 16, 2007.)

28-18-15. Variance of specific requirements. (a) Each operator seeking a variance from the regulations in this article shall submit to the department a written request for variance from the regulations in this article and shall provide information relevant to the request.

(b) Each request shall specifically set forth why the variance should be considered and how the requested variance addresses the intent of this article.

(c) A variance may be granted by the department whenever site-specific conditions or proposals are in keeping with the purpose and intent of this article. (Authorized by and implementing K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, and K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; effective Jan. 15, 1999.)

28-18-16. Waste-retention lagoon or

pond closure requirements. (a) Each operator of a confined feeding facility permitted by the department shall notify the department of any plans to cease operation of, close, or abandon the waste-retention lagoon or pond.

(b) Each operator shall maintain and comply with a valid water pollution control permit for the facility until closure of the waste-retention lagoon or pond is complete and all materials representing a threat to public health and the environment are removed.

(c) Each operator of a confined feeding facility that is located over the Equus Beds who is required to obtain a federal permit and who proposes the new construction or expansion of a waste-retention lagoon or pond shall develop and implement a waste-retention lagoon or pond closure plan. The operator shall submit the closure plan with the permit application to the department for consideration for approval. When submitting waste-retention lagoon or pond closure plans, each operator shall submit four copies of the plan.

(d) Each operator of a confined feeding facility required to obtain a federal permit shall develop and implement a waste-retention lagoon or pond closure plan if all of the following conditions are met:

(1) The waste-retention lagoon or pond is located over the Equus Beds.

(2) The operator is applying for the renewal of the permit after the effective date of this regulation.

(3) The operator does not have an approved waste-retention lagoon or pond closure plan. The operator shall submit the closure plan with the permit renewal application to KDHE. When submitting a waste-retention lagoon or pond closure plan, each operator shall submit four copies of the plan.

(e) Each waste-retention lagoon or pond closure plan shall include at a minimum the following information:

(1) A description of all animal waste management system components utilized to contain, control, or store process wastes at the facility;

(2) a description of the procedures to be employed to remove and dispose of animal or other process wastes;

(3) a description of the maintenance, deactivation, conversion, or demolition of all waste-retention lagoons or ponds or the closure of any waste-

retention lagoon or pond by one of the following methods:

(A) Removing the berms, and leveling and re-vegetating the site to provide erosion control;

(B) leaving the structure or structures in place for use as a freshwater farm pond or reservoir;

(C) retaining the structure or structures for future use as a part of an animal waste management system; or

(D) using any other method approved by the secretary that will be protective of the environment and will meet all statutory and regulatory requirements; and

(4) a description of, and detailed drawings for, the plugging of any water or groundwater monitoring wells at the confined feeding facility.

(f) Each operator of a confined feeding facility required to have a waste-retention lagoon or pond closure plan shall amend and submit the amended plan to the department for approval whenever specifically directed by the secretary or whenever warranted by one or more of the following:

(1) Any significant changes in operation of the facility;

(2) any significant change or modification in the animal waste management system; or

(3) any other significant conditions affecting the facility or the animal waste management system.

(g) Each operator of a confined feeding facility required to develop a waste-retention lagoon or pond closure plan shall retain the current plan at the site office of the facility or at a central records location, in a manner that is accessible to inspection by representatives of the department.

(h) The closure of a waste-retention lagoon or pond shall be completed within six months of either of the following:

(1) Notification to the department of the proposed closure of the waste-retention lagoon or pond; or

(2) termination of operations for any confined feeding facility whose operator is required to develop and implement a waste-retention lagoon or pond closure plan.

(i) Each operator seeking an extension of time for closure shall submit a written request to the secretary. The request shall detail the reasons for the extension. Only weather conditions or the legal change in ownership of the confined feeding facility shall be grounds for the secretary to consider an extension.

(j) If the operator of a confined feeding facility is unwilling or unable to properly close the waste-

retention lagoon or pond, the owner of the facility and the property owner shall be responsible for closing the waste-retention lagoon or pond in accordance with these regulations and in a manner that protects the waters of the state, public health, and the environment. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective March 16, 2007.)

28-18-17. Groundwater protection requirements for waste-retention lagoons or ponds and waste treatment facilities.

(a) The provisions of this article shall not apply to any permitted waste-retention lagoon or pond or waste treatment facility that is in existence or that the secretary approved for construction before the effective date of this regulation, unless information becomes available showing that the waste-retention lagoon or pond or the waste treatment facility presents an imminent threat to public health or the environment.

(b)(1) The provisions of this article shall not apply to any existing or proposed waste-retention lagoon or pond or waste treatment facility located at a confined feeding facility if all of the following conditions are met:

(A) The confined feeding facility existed on July 1, 1994.

(B) The operator registered the confined feeding facility with the secretary before July 1, 1996.

(C) The capacity of the existing or proposed waste-retention lagoon or pond or waste treatment facility is no larger than that necessary to serve the facility as described in the registration application submitted before July 1, 1996.

(D) The separation distance from the bottom of the existing or proposed waste-retention lagoon or pond or waste treatment facility to groundwater is less than 10 feet.

(2) Each operator of a confined feeding facility meeting the requirements of paragraph (b)(1) of this regulation and proposing to use a waste-retention lagoon or pond or waste treatment facility shall propose site-specific groundwater protection measures for the secretary's consideration for approval.

(c) Each new or expanded portion of a waste-retention lagoon or pond or waste treatment facility other than those described in subsections (a) and (b) shall be located a minimum of 10 feet above the static groundwater level, as measured

from the lowest elevation of the finished interior grade of the waste-retention lagoon or pond or the waste treatment facility. Each operator or permit applicant for a confined feeding facility shall notify the department at least two days before performing any site investigations to determine the static groundwater level at the site.

(d) Each operator or permit applicant shall ensure that each liner for a new or expanded portion of a waste-retention lagoon or pond or waste treatment facility meets the following requirements:

(1) If the new or expanded portion of the waste-retention lagoon or pond or waste treatment facility is not located over the Equus Beds or in a sensitive groundwater area, the materials used for the liner shall have a seepage rate of no more than $\frac{1}{4}$ inch per day.

(2) If the new or expanded portion of the waste-retention lagoon or pond or waste treatment facility is located in a sensitive groundwater area, the materials used for the liner shall have a seepage rate of no more than $\frac{1}{10}$ inch per day.

(3) If the new or expanded portion of the waste-retention lagoon or pond or waste treatment facility is located over the Equus Beds, either an impermeable synthetic membrane liner shall be used or the material used for the liner shall consist of either of the following:

(A) Two or more layers of compacted soil designed to have a seepage rate of no more than $\frac{1}{10}$ inch per day. To demonstrate that this seepage requirement is met, the soil liner seepage rate shall be determined within 12 months of placing the waste-retention lagoon or pond or waste treatment facility into operation. The test method used shall be the whole pond seepage test; or

(B) any material that has been approved through the variance process in accordance with K.A.R. 28-18-15.

(e) Each permit applicant or operator that conducts testing to determine the seepage rate shall submit four copies of the test results to the department.

(f) For the purpose of K.A.R. 28-18-1 through K.A.R. 28-18-17, an imminent threat to public health or the environment may be deemed to exist if physical, chemical, biological, or radiological substances or a combination of these substances is released into subsurface waters of the state and results in a concentration or amount of a substance in excess of the numerical criteria designated for aquatic life protection, agricultural use, or public health protection as provided in the

“Kansas surface water quality standards: table of numeric criteria,” dated December 6, 2004, which is adopted by reference in K.A.R. 28-16-28e. If the background concentration of a substance is naturally occurring and is greater than the numerical criterion, the background concentration shall be considered the criterion. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective March 16, 2007.)

Article 18a.—SWINE AND RELATED WASTE CONTROL

28-18a-1. Definitions. The following terms, and abbreviations shall have the following meanings, unless otherwise defined in an individual regulation or unless a different meaning is clear from the context in which it is used. Terms and abbreviations not provided in this article shall have the meanings specified in K.S.A. 65-101 et seq. and amendments thereto; articles 5, 16, 18, and 30; or the clean water act (CWA). If the same word is defined both in Kansas statutes or the regulations of this article and in any federal regulation adopted by reference in these regulations or in state regulations referenced in this article and the definitions are not identical, the definition prescribed in Kansas statutes or the regulations of this article shall control.

(a) “Agronomic application rates” has the meaning specified in K.S.A. 2-3302, and amendments thereto, and is regulated by the secretary of the Kansas department of agriculture.

(b) “Animal unit” has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(c) “Animal unit capacity” has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(d) “Best available technology for swine facilities” has the meaning specified in K.S.A. 65-1,178, and amendments thereto.

(e) “Best management practices for swine facilities” has the meaning specified in K.S.A. 65-1,178, and amendments thereto.

(f) “Certification” means a document issued by the secretary in lieu of a water pollution control permit, indicating that the facility meets applicable animal waste management statutes and regulations and does not represent a significant water pollution potential.

(g) “Change in operation” and “modification” mean any of the following:

(1) Expansion or enlargement of a facility beyond the scope or boundaries established by registration, permit, certification, or approved plans and specifications;

(2) any increase in the animal unit capacity beyond that authorized by a permit or certification; or

(3) a change in construction or operation of a swine facility that affects the collecting, storage, handling, treatment, utilization, or disposal of swine or other process wastes.

(h) “Clean water act” and “CWA” mean the federal water pollution control act, 33 U.S.C. 1251 et seq., as in effect on November 27, 2002.

(i) “Confined feeding facility” has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(j) “Dead swine handling plan” means a written document that identifies the procedures by which the operator of a swine facility shall handle dead swine, to minimize the potential for the generation of nuisance, environmental, or public health threats.

(k) “Department” and “KDHE” mean the Kansas department of health and environment.

(l) “Director” means the director of the division of environment of the Kansas department of health and environment.

(m) “Division” means the division of environment, Kansas department of health and environment.

(n) “Emergency response plan for swine” means a written document that identifies the following procedures to be implemented by the operator of a swine facility if an emergency occurs:

(1) Actions to contain or manage an unauthorized discharge, spill, or release of swine or other process wastes;

(2) notification of the department; and

(3) any actions required to mitigate the adverse effects of an emergency.

(o) “Entity,” for the purposes of these regulations, means a person, individual, association, company, corporation, institution, group of individuals, joint venture, partnership, or federal, state, county, or municipal agency or department.

(p) “Environmental protection agency” and “EPA” mean the United States environmental protection agency.

(q) “Equus Beds,” for the purposes of these

regulations, means an aquifer underlying the sections of land listed in the following table:

County	Range	Township	Section
Harvey	01W	22S	06, 07, 18, 19, 30, 31
Harvey	01W	23S	06, 07, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	01W	24S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
Harvey	02W	22S	All sections
Harvey	02W	23S	All sections
Harvey	02W	24S	All sections
Harvey	03W	22S	All sections
Harvey	03W	23S	All sections
Harvey	03W	24S	All sections
McPherson	01W	19S	31, 32, 33, 34, 35
McPherson	01W	20S	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33
McPherson	01W	21S	05, 06, 07, 18, 19, 30, 31
McPherson	02W	21S	12, 13, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
McPherson	03W	18S	28, 29, 30, 31, 32, 33
McPherson	03W	19S	04, 05, 06, 07, 08, 09, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34
McPherson	03W	20S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, 34, 35
McPherson	03W	21S	02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
McPherson	04W	18S	20, 21, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36
McPherson	04W	19S	01, 02, 03, 04, 09, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
McPherson	04W	20S	01, 02, 03, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, 36
McPherson	04W	21S	01, 02, 03, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36
Reno	04W	22S	All sections
Reno	04W	23S	All sections
Reno	04W	24S	All sections
Reno	04W	25S	All sections
Reno	04W	26S	All sections

County	Range	Township	Section
Reno	05W	22S	All sections
Reno	05W	23S	All sections
Reno	05W	24S	All sections
Reno	05W	25S	All sections
Reno	05W	26S	All sections
Reno	06W	22S	All sections
Reno	06W	23S	All sections
Reno	06W	24S	All sections
Reno	06W	25S	All sections
Reno	06W	26S	All sections
Reno	07W	22S	All sections
Reno	07W	23S	All sections
Reno	07W	24S	All sections
Reno	07W	25S	All sections
Reno	07W	26S	All sections
Sedgwick	01E	26S	06, 07, 08, 17, 18, 19, 20
Sedgwick	01W	25S	03, 04, 05, 06, 07, 08, 09, 10, 15, 16, 17, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
Sedgwick	01W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32
Sedgwick	01W	27S	05, 06
Sedgwick	02W	25S	All sections
Sedgwick	02W	26S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 34, 35, 36
Sedgwick	02W	27S	01
Sedgwick	03W	25S	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36
Sedgwick	03W	26S	01, 02, 03, 04, 11, 12

(r) "Existing swine facility" has the meaning specified in K.S.A. 65-1,178, and amendments thereto.

(s) "Federal permit," "national pollutant discharge elimination system permit," and "NPDES permit" mean an authorization, license, or equivalent control document issued by the EPA or an approved state to implement the requirements of 40 C.F.R. Parts 122, 123, 124, and 412.

(t) "Food animals" means swine produced for consumption.

(u) "Fur animals" means swine raised for the skin, pelt, or hair.

(v) "Groundwater," as used in this article, means water located under the surface of the land that is or can be the source of supply for wells, springs, seeps, or streams, or that is held in aquifers.

For the purposes of this article, groundwater shall be considered capable of being a source of supply for wells if at least one of the following conditions is met:

(1) The groundwater can be produced at a rate of 10 gallons or more per hour from a borehole with a diameter of nine or fewer inches. In determining the groundwater production rate for an excavation, borehole, or existing water or monitoring well, the quantity of produced water shall be adjusted for comparison purposes to the surface area of a borehole with a diameter of nine inches.

(2) The groundwater is currently being used within ½ mile of the proposed lagoon, regardless of the rate at which water can be produced.

(3) There is evidence of past groundwater use within ½ mile of the proposed lagoon.

(w) "Habitable structure" has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(x) "Impermeable synthetic membrane liner" means a commercially manufactured membrane liner composed of synthetic materials commonly identified as being plastic, plastic polymer, or other synthetic materials that, when installed, provide for the more stringent of either of the following:

(1) A maximum monitored or calculated seepage rate of 1/64 inch per day; or

(2) the liner manufacturer's criteria for the maximum monitored or calculated seepage rate for the installed membrane liner, expressed in units of volume per unit area per unit of time (gallons per square foot per day).

(y) "Land application" means the distribution of swine or other process wastes onto, or incorporation into, the soil mantle for the purpose of disposal or utilization by crops or vegetation.

(z) "Liner" means any designed barrier in the form of in situ, layer, membrane, or blanket materials utilized or installed to reduce the potential for a significant hydrologic connection between swine or other process wastes that are controlled or retained by swine waste management systems and waters of the state.

(aa) "Manure management plan for swine" means a written document that identifies the procedures by which the operator of a swine facility shall operate, manage, and maintain a swine waste management system. This plan shall describe the methods for the handling and either disposal or

utilization of all swine or other process wastes generated by the swine facility.

(bb) "Maximum soil liner seepage rate" and "specific discharge" mean the flow rate of water through the liner of a swine waste-retention lagoon or pond and shall be expressed as velocity (distance/time). The maximum seepage rate shall be calculated as $v = k(h/d)$, in which "k" is the hydraulic conductivity (coefficient of permeability) and "(h/d)" is the hydraulic gradient. The hydraulic gradient is the maximum vertical distance "h" measured from the liquid surface to the liner bottom divided by the thickness of the soil liner "d." When calculating the maximum seepage rate, the maximum design depth, not considering design freeboard, shall be used.

(cc) "Minimum standards of design, construction, and maintenance" means the following:

- (1) Effluent standards and limitations;
- (2) other performance standards for treatment or utilization; and
- (3) other standards of design, construction, and maintenance for confined feeding facilities or swine pollution control systems published by KDHE.

(dd) "Monitoring" means all procedures using any of the following methods:

- (1) Either systematic inspection or collection and analysis of data on the operational parameters of a swine facility or swine pollution control system; or
- (2) the systematic collection and analysis of data on the quality of the swine or other process wastes, groundwater, surface water, or soils on or in the vicinity of the swine facility or swine pollution control system.

(ee) "National pollutant discharge elimination system" and "NPDES" mean the national system for the issuance of permits under 33 U.S.C. section 1342, and shall include any state or interstate program that has been approved by the EPA administrator, in whole or in part, pursuant to 33 U.S.C. section 1342.

(ff) "Nutrient management plan" means a written document that identifies the practices and procedures that the operator of a swine facility that is required to obtain a federal permit plans to use to operate and maintain the swine waste management and pollution control system and to manage the handling, storage, utilization, and disposal of wastes generated by the swine facility.

(gg) "Nutrient utilization plan for swine" means a written document, on a form prescribed by the

secretary of the Kansas department of agriculture, addressing site-specific conditions for the land application of manure, wastewater, and other nutrient sources from swine facilities, at agronomic application rates.

(hh) "Odor control plan for swine" means a written document for swine facilities that describes site-specific and facility-specific design considerations, operational activities and procedures, maintenance activities and procedures, and management practices to be employed to minimize the potential for or limit odors from a swine facility, swine waste management, or swine pollution control system.

(ii) "Oil or gas well" shall have the meaning assigned to the term "well" in K.S.A. 55-150, and amendments thereto.

(jj) "Pleasure animals," as used in this article, means swine that are not produced for consumption or their skin, pelts, or hair.

(kk) "Point source" has the meaning specified in K.A.R. 28-16-28b.

(ll) "Pollution" has the meaning specified in K.S.A. 65-171d, and amendments thereto.

(mm) "Precipitation runoff" means the rainwater or the meltwater that is derived from snow, hail, sleet, or other forms of atmospheric precipitation and that flows by gravity over the surface of the land.

(nn) (1) "Process wastes" means any of the following:

(A) Excrement from swine, wastewater, or swine carcasses;

(B) precipitation that comes into contact with any manure, litter, bedding, or other material used in or resulting from the production of swine;

(C) spillage or overflow from watering systems;

(D) wastes from washing, cleaning, or flushing pens, barns, manure pits, equipment, trucks, trailers, or other associated swine facilities;

(E) wastes from washing swine or spraying swine for cooling;

(F) wastes from dust control;

(G) boiler blowdown and water softener regenerate wastes;

(H) precipitation runoff from confinement, loading, and unloading areas;

(I) spillage of feed, swine wastes, or any other process wastes described in this regulation;

(J) discharges from land application fields that occur during application;

(K) precipitation runoff from land application fields, if liquid or concentrated liquid wastes are

applied during frozen, snow-covered, or saturated soil conditions without approval by the department;

(L) raw, intermediate, or finished materials associated with wastes or contaminated storm water runoff from swine waste or dead swine composting operations; or

(M) flows or runoff from waste storage areas.

(2) Process wastes shall not include swine wastes spilled by trucks transporting livestock on city, township, county, state, or federal streets, roads, or highways.

(oo) "Public livestock market" has the meaning specified in K.S.A. 47-1001, and amendments thereto. For the purposes of these regulations, this term shall include public livestock markets where federal veterinary inspections are regularly conducted.

(pp) "Registration" means any required fee and the properly completed and executed documents designated by the division and any additional required documents or information necessary for determining the need for a water pollution control permit.

(qq) "Salt solution mining well" has the meaning specified in K.S.A. 55-1,120, and amendments thereto.

(rr) "Secretary" means the secretary of the Kansas department of health and environment.

(ss)(1) "Sensitive groundwater areas," for the purpose of these regulations, means aquifers generally comprised of alluvial aquifers, the area within the boundaries of the Equus Beds groundwater management district no. 2 (GMD #2), and the dune sand area located south of the great bend of the Arkansas River. Each sensitive groundwater area shall be any section of land listed in "Kansas sensitive groundwater areas for wastewater lagoons," prepared by KDHE and dated January 1, 2005, which is adopted by reference in K.A.R. 28-16-160.

(2) Any operator proposing a new swine waste-retention lagoon or pond or expansion of an existing swine waste-retention lagoon or pond may request that the director make a site-specific sensitive groundwater area determination. The request shall be made in writing to the director. The request shall contain supporting data and information and an explanation of why the area in question should not be considered to be a sensitive groundwater area, for the purpose of these regulations.

(tt) "Sewage" has the meaning specified in K.S.A. 65-164, and amendments thereto.

(uu) "Significant water pollution potential" means any of the following, as determined by the secretary:

(1) A swine feeding operation that utilizes structures designed and constructed to collect, control the flow of, and direct swine or other process wastes, tanks, manure pits, or other structures designed and constructed to collect or store swine or other process wastes, waste-retention lagoons or ponds, waste treatment facility or facilities, or a swine waste management system;

(2) lots, pens, or concentrated feeding areas with creeks, streams, intermittent waterways, or any other conveying channel or device that has the potential to carry pollutants to waters of the state running through or proximate to the lots, pens, or concentrated feeding areas;

(3) any operation that cannot retain or control swine or other process wastes on the operator's facility or property, or adjacent property without the owner's permission; or

(4) a swine feeding operation determined to practice improper collection, handling, or disposal of swine or other process wastes that have the potential to degrade or impair the quality of any waters of the state.

(vv) "Surface waters," for water quality purposes, has the meaning specified in K.A.R. 28-16-28b.

(ww) "Suspend" and "suspension," as used in this article, mean, respectively, to abrogate temporarily and the temporary abrogation of a water pollution control permit or certification issued to a swine facility.

(xx) "Swine facility" has the meaning specified in K.S.A. 65-1,178, and amendments thereto.

(yy) "Swine facility closure plan" means a written document that identifies the practices and procedures that the operator of a swine facility is required to follow when closing the facility to protect public health and safety and the environment, and to prevent the escape of swine or other process wastes from the facility.

(zz) "Swine operator" means an individual, association, company, corporation, municipality, group of individuals, joint venture, partnership, a state or federal agency or department, or any business owning, leasing, or having charge or control of one or more swine facilities.

(aaa) "Swine pollution control system" means any land, structures, or practices utilized for the

collection, containment, storage, distribution, land application, or disposal of swine or other process wastes generated by swine facility operations. This term shall include any of the following:

(1) Site grading to divert extraneous, uncontaminated precipitation runoff around the swine facility;

(2) structures designed and constructed to collect, control the flow of, and direct swine or other process wastes;

(3) vegetation cover utilized for controlling erosion or for filtering swine or other process wastes;

(4) tanks, manure pits, or other structures designed and constructed to collect or store swine or other process wastes;

(5) waste-retention lagoons or ponds;

(6) land used for the application, utilization, or disposal of swine or other process wastes; and

(7) waste treatment facilities.

(bbb) "Swine waste management system" is as defined in K.S.A. 65-1,178, and amendments thereto.

(ccc) "Swine waste-retention lagoon or pond" has the meaning specified in K.S.A. 65-1,178, and amendments thereto.

(ddd) "Variance" means the secretary's written approval or permit authorizing a proposed action that knowingly results in a lack of conformity with one or more provisions of these regulations or the minimum standards of design, construction, and maintenance. Each variance authorized by the secretary shall be deemed to protect public health and the environment and to comply with the intent of these regulations and with federal NPDES permit requirements.

(eee) "Waste management plan" means a written document that identifies the practices and procedures that the operator of a swine facility not required to obtain a federal permit plans to use to operate and maintain the swine waste management and pollution control system and to manage the handling, storage, utilization, and disposal of wastes generated by the swine facility.

(fff) "Waste-retention lagoon or pond" means excavated or diked structures, or natural depressions provided for or used for the purpose of containing or detaining swine or other process wastes. Discharges from waste-retention lagoons or ponds shall not be allowed, except as authorized by a water pollution control permit.

(ggg) "Waste treatment facilities" means structures or devices that collect, store, stabilize, treat, or otherwise control pollutants, so that after the

discharge, disposal, or land application of treated wastes, water pollution will not occur, and public health and the waters of the state will be protected.

(hhh) "Water pollution control permit" and "permit" mean an authorization, license, or equivalent control document issued by the secretary. This term shall not include any document that has not yet been the subject of final action by the secretary.

(iii) "Water quality standards" means the Kansas surface water quality standards as specified in K.A.R. 28-16-28b through K.A.R. 28-16-28g.

(jjj) "Water well" has the meaning specified in K.S.A. 82a-1203, and amendments thereto.

(kkk) "Waters of the state" has the meaning specified in K.S.A. 65-161, and amendments thereto.

(lll) "Whole pond seepage test" means a measurement of the evaporation from, and the change in water level of the waste-retention lagoon, pond, or structure, or swine waste-retention lagoon, pond, or structure using either of the following:

(1) Any method that meets the requirements specified in "standards for measuring seepage from anaerobic lagoons and manure storages," which is adopted by reference in K.A.R. 28-18-1; or

(2) any equivalent method approved by the secretary.

(mmm) "Wildlife refuge" has the meaning specified in K.S.A. 65-171d, and amendments thereto. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 65-171a, K.S.A. 2005 Supp. 65-171d, K.S.A. 65-171h, 65-1,178, 65-1,179, 65-1,181, 65-1,182, 65-1,183, 65-1,184, 65-1,187, 65-1,189, 65-1,190 and 65-1,188; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-2. Registration and application requirements. (a) Each entity proposing the construction, modification, or expansion of an unregistered swine facility, public livestock market, collection center, or transfer station, and each swine operator of an existing unregistered swine facility, public livestock market, collection center, or transfer station shall submit a registration form for the facility to the secretary, if any of the following conditions is met:

(1) The proposed or existing unregistered facility has an animal unit capacity of 300 or more animal units.

(2) The proposed or existing unregistered facility presents a significant water pollution potential as defined in K.A.R. 28-18a-1.

(3) The entity or swine operator is required by statute to obtain a permit for the facility.

(4) The entity or swine operator elects to register the facility in order to obtain a permit or certification, even though there is no requirement to obtain a permit or certification.

(b) Each registration form that any entity or swine operator submits to the secretary shall be accompanied by the required \$25 fee.

(c) Each entity proposing the construction, modification, or expansion of a swine facility, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes and each swine operator of an unpermitted swine facility, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes shall submit a permit application for the facility to the secretary if any of the following conditions is met:

(1) The proposed or existing unpermitted facility presents a significant water pollution potential as defined in K.A.R. 28-18a-1.

(2) The entity or swine operator is required by statute to obtain a permit.

(3) The entity or swine operator proposing the construction, modification, or expansion of the facility or the swine operator of a facility that is not required to obtain a permit elects to obtain a permit.

(d) Each application that any entity or swine operator submits to the secretary shall be accompanied by the permit fee required pursuant to K.A.R. 28-16-56d.

(e) Each entity or swine operator proposing the construction, modification, or expansion of a swine facility and each swine operator of an unpermitted swine facility that is required by statute or regulation to obtain a federal permit shall apply to the secretary for a federal permit.

(f)(1) Each swine operator or entity proposing either the construction, modification, or expansion of a swine facility, swine waste management system, or swine pollution control system that is required to submit a registration form or apply for a permit shall not initiate construction until the swine operator or entity has obtained either of the following:

(A) The secretary's written approval of the application, construction plans, specifications, and waste management plan, for each facility or sys-

tem that the entity or swine operator proposes to be constructed, modified, or expanded; or

(B) a certification, issued by the secretary, for each facility or system that the entity or swine operator proposes to be constructed, modified, or expanded.

(2) Each swine operator or entity that is proposing the construction, modification, or expansion of a swine facility, swine waste management system, or swine pollution control system required to have a permit and that undertakes the construction, modification, or expansion before the issuance of a new or modified permit by the secretary shall be deemed to be undertaking the construction solely at the risk of the swine operator or entity.

(3) Before each swine operator or entity proposing the construction, modification, or expansion of a swine facility, swine waste management system, swine pollution control system, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes that is required to have a permit or certification begins the operation of the new, modified, or expanded portion of a swine facility, swine waste management system, swine pollution control system, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes, the swine operator or entity shall obtain a new or modified permit or certification issued by the secretary.

(4) Before each swine operator or entity proposing the construction, modification, or expansion of a swine facility, swine waste management system, swine pollution control system, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes that is required to have a permit or certification begins the stocking of a new, modified, or expanded portion of a swine facility, swine waste management system, swine pollution control system, public livestock market, collection center, transfer station, or truck-washing facility for animal wastes at levels above the capacity authorized in the current permit or certification, the swine operator or entity shall obtain a new or modified permit or certification issued by the secretary. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2003 Supp. 65-166a, K.S.A. 2003 Supp. 65-171d, and K.S.A. 65-1,179; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-4. Filing of applications and payment of fees. (a) Each application shall be filed according to K.A.R. 28-16-59 or K.S.A. 65-1,178 and amendments thereto, as applicable.

(b) For the purpose of providing adequate public notice regarding a permit for any proposed new construction or proposed new expansion of a swine facility, the swine operator shall provide to the secretary the name or names and mailing address or addresses of the following:

(1) The United States post office or offices serving the immediate area of the swine facility; and

(2) each owner of a habitable structure or any property located within one mile of the swine facility perimeter, as described by K.S.A. 65-171d, and amendments thereto.

(c) In addition to the application requirements of K.A.R. 28-16-59, for any new construction or new expansion of a swine facility, each swine applicant shall submit the following information:

(1) A map identifying the location and layout of the swine facility or the facility perimeter;

(2) a map identifying the location of any habitable structure or city, county, state, or federal park within one mile of the swine facility or the facility perimeter;

(3) a map identifying the location of any wildlife refuge within 16,000 feet of the swine facility or the facility perimeter;

(4) a map identifying all water wells on the swine facility property;

(5) a map identifying any streams and bodies of surface water within one mile of the swine facility or the facility perimeter;

(6) for swine facilities that utilize a swine waste-retention lagoon or pond, any information that the applicant possesses indicating the presence of any unplugged oil, gas, or salt solution mining wells located at the proposed or existing swine facility;

(7) a waste management plan, for any swine facility whose operator is not required to obtain a federal permit;

(8) for swine facilities with an animal unit capacity of 1,000 animal units or more where the swine at the facility are not owned by the operator of the facility, a copy of the executed contract between the facility operator and owner of the swine, specifying responsibility for management of the manure and wastewater generated at the facility; and

(9) for swine facilities with an animal unit capacity of 1,000 animal units or more, the following information:

(A) A manure management plan;

(B) a nutrient utilization plan that meets the requirements of the Kansas department of agriculture, if the facility applies manure or wastewater to land;

(C) an emergency response plan;

(D) an odor control plan;

(E) a dead swine handling plan;

(F) a nutrient management plan;

(G) a groundwater monitoring plan, if required;

(H) a closure plan, if required; and

(I) for swine facilities with an animal unit capacity of 3,725 animal units or more, financial assurance for closure of the swine facility and closure of the swine waste-retention lagoons or ponds.

(d) Swine facilities on separate pieces of land without a contiguous ownership boundary shall be classified as separate operations, and each applicant shall be assessed a fee under K.A.R. 28-16-56d. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, K.S.A. 65-171h, K.S.A. 65-1,179, 65-1,181, 65-1,184, 65-1,187, 65-1,188, 65-1,189, and 65-1,190; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-5. Transfer of a permit or certification. (a) The automatic transfer of a permit shall be prohibited. Each swine operator wanting to transfer a water pollution control permit of a confined feeding facility shall make application consistent with the provisions of the regulations in this article.

(b) The automatic transfer of a certification shall be prohibited. Each swine operator wanting to transfer a certification for a confined feeding facility shall register with the department, in accordance with this article.

(c) The existing permit or certification shall remain in effect until the department authorizes the transfer by letter or reissues the permit or certification. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18a-6. Development of a draft permit. Development of each draft permit shall be consistent with the requirements of K.A.R. 28-16-

60. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18a-7. Public notice of permit actions and public hearings. (a) Public notice of permit actions and public hearings shall be consistent with the requirements of K.A.R. 28-16-61. Public hearings scheduled by the department shall address only those matters for which the secretary has authority.

(b) A swine operator proposing either new construction of a swine facility or new expansion of an existing swine facility shall meet the following requirements:

(1) Publish a single notice of application in the official county newspaper and in a newspaper regularly published and generally circulated serving the county and general area of the proposed or existing swine facility, notifying the public of the proposal. If the official county newspaper is regularly published and generally circulated throughout the county and general area of the proposed or existing swine facility, a single notice in the official county newspaper shall be adequate. If a proposed or existing facility site is within one mile of an adjoining county, a single notification shall also be provided in the official newspaper serving the adjoining county.

(A) Publication of the notice in the newspaper or newspapers by the swine operator shall be made before the department can place the permit on public notice in the Kansas register. The operator shall be responsible for the cost of publication in the newspaper or newspapers.

(B) The notice that the swine operator shall publish in the newspaper or newspapers shall contain the information pursuant to L. 1998, ch. 143, sec. 3, and amendments thereto [K.S.A. 1998 Supp. 65-1,179 (c), and amendments thereto].

(2) Notify the department verbally or by facsimile within two working days after the date of publication of the notice in the newspaper or newspapers to confirm that the notice has been published. Within 20 calendar days following the date of publication, the operator shall provide the department a publisher's affidavit of publication or certified copy of the publication. The process-

ing of the permit shall be terminated by the department until the operator provides the publisher's affidavit or certified copy of the publication.

(3) Provide a copy of the notice to be published in the newspaper or newspapers to owners of habitable structures located within the prescribed separation distance for the swine facility. The notification shall be provided before the department places the permit on public notice in the Kansas register. The notice shall be provided by certified mail. The swine operator shall provide proof of this notification to the department within 20 calendar days of the notice being mailed.

(4) Provide a copy of the notice to be published in the newspaper or newspapers to the county commission representing the county in which the swine facility is or will be located. In addition, a copy of the notice shall be directed to the mayor of each municipality whose municipal boundary is located three miles or less from the swine facility or facility perimeter. Notification shall be made by certified mail before the department places the permit on public notice in the Kansas register. The swine operator shall provide proof of this notification to the department within 20 calendar days of the date the notice is mailed.

(c) Owners of habitable structures located within the applicable separation distance pertaining to habitable structures and either a proposed new swine facility or the proposed expansion of an existing swine facility that seek a public hearing shall meet the following requirements:

(1) Request a public hearing either before or during the public comment period established in the public notice published in the Kansas register by the department;

(2) request a public hearing in conformance with the provisions set forth in the public notice and shall also include the mailing address and telephone number of the habitable structure owner; and

(3) provide proof, upon request and in a form satisfactory to the department, of ownership of the habitable structure. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 3 [K.S.A. 1998 Supp. 65-1,179]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998,

ch. 143, sec. 3; [K.S.A. 1998 Supp. 65-1,179] effective Jan. 15, 1999.)

28-18a-8. Permit; terms and conditions.

(a) The terms and conditions of all permits shall be consistent with the requirements of K.A.R. 28-16-62, as appropriate.

(b) (1) Swine waste management and pollution control systems shall be designed, constructed, operated, and maintained in a manner that prevents pollution of waters of the state.

(2) Each operator of a swine waste management and pollution control system for a swine facility with an animal unit capacity of 1,000 or more shall ensure that the swine waste management and pollution control system is designed, constructed, operated, and maintained to prevent the discharge of swine or other process wastes to surface waters of the state. Any operator of a swine waste management and pollution control system may discharge the following to surface waters of the state, whenever precipitation events, either chronic or catastrophic, cause an overflow from a swine waste management or pollution control system designed, constructed, operated, and maintained to contain all swine and other process wastes:

(A) Swine or other process wastes; and

(B) the direct precipitation and the runoff from a 25-year, 24-hour precipitation event for the location of the swine facility.

(3)(A) Except as provided in paragraph (b)(3)(B), each swine waste management and pollution control system for any swine facility with an animal unit capacity of 999 or less shall be designed, constructed, operated, and maintained to prevent the discharge of swine or other process wastes to surface waters of the state as required in paragraph (b)(2).

(B) Any operator of a swine waste management and pollution control system for a swine facility with an animal unit capacity of 999 or less may discharge swine waste or other process wastes to surface waters of the state, consistent with the requirements of K.A.R. 28-16-28b through K.A.R. 28-16-28g, K.A.R. 28-16-57a, and K.A.R. 28-16-62, as appropriate, when specifically authorized by a permit.

(c) For each emergency or accidental discharge, overflow, or unplanned release of swine or other process wastes, each swine operator shall report the incident to the department within two hours of discovery. Each operator shall report any emergency, spill, accidental discharge, overflow, or un-

planned release associated with swine or other process wastes to the director, using the telephone numbers provided by the department. Each operator shall submit a written report to the department within three days of the incident.

(d) Each swine operator shall retain a copy of the current permit issued by the secretary at the site office for the facility or at a central records location.

(e) Each swine operator shall be responsible for advising the secretary within 60 days of any changes in mailing address or telephone number regarding the facility or designated facility contact.

(f) Each swine operator shall operate the facility in a manner to minimize or prevent any discharge that is in violation of the permit or that has a potential to adversely affect human health or the environment.

(g) Each swine operator shall, at all times, properly operate and maintain the swine waste management and pollution control system and any related appurtenances that are installed or utilized by the swine operator to achieve compliance with the conditions of the permit.

(h) Each operator of a swine facility with an animal unit capacity of 1,000 or more shall notify the department whenever the swine operator does not own all the swine at the swine facility, pursuant to K.S.A. 65-1,181, and amendments thereto.

(i) Each operator of a swine facility with an animal unit capacity of 1,000 or more shall notify the department before the operator sells or gives manure or wastewater to a person that is not employed by the swine facility and whenever disposal is by means other than land application on areas covered by the approved nutrient utilization plan for the swine facility. When the approved manure management plan for the swine facility addresses the requirements in K.S.A. 65-1,181 and amendments thereto, notification to the department shall not be required.

(j) Each operator of a swine facility with an animal unit capacity of 1,000 or more who land applies manure or wastewater shall comply with the nutrient utilization plan approved by the Kansas department of agriculture, pursuant to K.S.A. 65-1,182, and amendments thereto.

(k) Each operator of a swine facility with an animal unit capacity of 1,000 or more who land applies manure or wastewater and is required to develop and to implement a nutrient utilization

plan, as prescribed by the secretary of the Kansas department of agriculture, shall file the plan and any amendments to the plan with KDHE.

(l) Each operator of a swine facility required to develop a swine facility closure plan or a swine waste-retention lagoon or pond closure plan, or both, shall comply with each plan, as approved by the secretary. The operator shall amend each plan whenever warranted by changes in the facility or in other conditions affecting the facility, pursuant to K.S.A. 65-1,189, and amendments thereto.

(m) Each swine facility that is required to be permitted by the department and that has an animal unit capacity of 1,000 or more shall be staffed by a department-certified operator or an operator in training. (Authorized by K.S.A. 2005 Supp. 65-171d, K.S.A. 65-1,181, 65-1,183, and 65-1,184; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-166a, K.S.A. 2005 Supp. 65-171d, K.S.A. 65-171h, K.S.A. 65-1,181, 65-1,182, 65-1,183, 65-1,184, 65-1,185; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-9. Certification; terms and conditions. (a) Each swine operator shall comply with all conditions, requirements, limitations, and operating provisions stipulated in the certification.

(b) Operation of a swine facility in violation of any conditions, requirements, limitations, and operating provisions of a certification, or in a manner that represents a significant water pollution potential, shall result in the revocation of the certification and any appropriate enforcement action. If a significant water pollution potential exists, as defined in K.A.R. 28-18-1, the swine operator shall apply for a permit. (Authorized by K.S.A. 2003 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, and K.S.A. 2003 Supp. 65-171d; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-10. Permits; monitoring and reporting. (a) Any monitoring and reporting required by the department in the terms and conditions of a permit, certification, order, directive, or consent agreement shall be conducted consistent with the provisions of K.A.R. 28-16-63, as appropriate.

(b) The emergency or accidental discharge, overflow, or unplanned release of swine or other process wastes into surface waters of the state shall be reported to the department, pursuant to K.A.R. 28-16-27, within two hours of discovery. Each operator shall report any emergency, spill, accidental discharge, overflow, or unplanned re-

lease associated with swine or other process wastes to the department using telephone numbers as provided by the department. Each operator shall submit a written report to the department within three days of the incident.

(c) Any analysis required by a permit, certification, order, directive, or consent agreement of the department shall be performed in accordance with the provisions of 40 C.F.R. Part 136, as in effect on July 1, 1998, or as approved by the department.

(d) Each analysis shall be performed by a laboratory that has been certified by the department pursuant to K.S.A. 65-171l, and amendments thereto, or as approved by the department.

(e) 40 C.F.R. Part 136, as in effect on July 1, 1998, is adopted by reference. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and K.S.A. 65-171h; effective Jan. 15, 1999.)

28-18a-11. Confined feeding facilities; federal requirements. For the purpose of issuing federal permits and administering NPDES program requirements, the following definitions and provisions, as in effect on July 1, 2006 and as amended by 72 fed. reg. 40250 on July 24, 2007, are hereby adopted by reference:

(a) The concentrated animal feeding operation exclusions specified in 40 C.F.R. 122.3 (e) and 40 C.F.R. 122.3 (f);

(b) the provisions addressing concentrated animal feeding operations specified in 40 C.F.R. 122.23(b), (c), and (e), and 122.42(e);

(c) except for 40 C.F.R. 412.32, 412.44, and 412.46, the provisions addressing effluent limitations for concentrated animal feeding operations specified in 40 C.F.R. Part 412. (Authorized by K.S.A. 2006 Supp. 65-171d; implementing K.S.A. 65-165, K.S.A. 2006 Supp. 65-166a, K.S.A. 2006 Supp. 65-171d; effective Jan. 15, 1999; amended March 16, 2007; amended Jan. 4, 2008.)

28-18a-12. Design and construction of swine waste management and swine pollution control systems. (a) If a swine facility represents a significant water pollution potential or if the swine operator of the swine facility is required by statute or regulation to obtain a permit, as determined by the secretary, the swine operator

shall provide a swine waste management or pollution control system that is designed in accordance with the minimum standards of design, construction, and maintenance and is constructed and operated in accordance with construction plans, specifications, and either a waste management plan or nutrient management plan approved by the secretary. If site topography, operating procedures, experience, and other available information indicate that more than the minimum standards of design, construction, and maintenance are required to effect adequate water pollution control, additional provisions may be required. Each applicant shall ensure that any new construction or new expansion of a swine facility, swine waste management system, or swine pollution control system meets the requirements of the "minimum standard of design, construction, and maintenance," as defined in K.A.R. 28-18a-1.

(b) The swine operator shall not initiate operation of any new swine facility, new swine waste management system, or new swine pollution control system, or expanded portions of any existing swine facility, existing swine waste management system, or existing swine pollution control system, until after issuance of the new or modified permit by the secretary. Initiation of construction before the issuance of a new or modified permit by the secretary shall be deemed to be solely at the risk of the swine operator.

(c) For the purpose of these regulations, each reference to a professional engineer or consultant shall be deemed to designate an individual offering a service for a fee for the design of a swine facility, swine waste management system, or swine pollution control system, exclusive of the nutrient utilization plan, soil or cropping consultations, hydrologic work involved in conducting hydrologic or geologic investigations, or in the siting, design, or construction of groundwater monitoring wells. Each reference to a professional engineer shall be deemed to designate an individual licensed to practice engineering in Kansas by the Kansas state board of technical professions.

(d) Consultants that prepare plans and specifications for the new construction or new expansion of swine facilities that are submitted to comply with statutes and regulations shall provide KDHE with documentation that adequate general commercial liability insurance coverage addressing errors and omissions in the design plans and specifications has been obtained and is in effect.

(e) (1) Each operator shall initiate any proposed

new construction or new expansion of a swine facility that has been approved by the secretary and for which the required permit or permit modification has been issued, within two years after the date on which the permit or permit modification is effective or pursuant to the requirements of the permit issued by the secretary. Each operator shall complete any proposed new construction or new expansion of a swine facility that has been approved by the secretary and for which the required permit or permit modification is issued, within three years after the date on which the permit or permit modification is effective or as required by the permit issued by the secretary.

(2) Failure to initiate the approved construction or expansion within two years and to complete the approved construction or expansion within three years after the effective date of the permit or permit modification shall void the secretary's approval of the construction plans, specifications, and other associated plans. If phased construction is proposed, the initiation and completion of construction shall conform to the schedule stipulated by the secretary.

(3) If the approval becomes void, the permit or permit modification shall remain in effect for the term of the permit, but the operator shall resubmit the construction plans, specifications, and other associated plans to the secretary for review and consideration for approval before initiating the construction or expansion of the swine facility.

(f) Neither the approval of construction plans, specifications, or other required plans, nor the issuance of a permit or certification by the secretary shall prohibit the secretary from taking any enforcement action if the swine waste management or pollution control system fails to protect the waters of the state, meet any specified effluent criteria, or comply with state surface water quality standards. In addition, the secretary's approval of the plans or the secretary's issuance of a permit or certification shall not constitute a defense by the operator regarding violation of any statute, regulation, permit condition, or requirement.

(g) A new swine facility, swine waste management system, or swine pollution control system shall not be built in any stream, river, lake, reservoir, or water bodies meeting the definition of jurisdictional wetlands and consistent with the definition of "surface waters" in K.A.R. 28-16-28b.

(h) Each operator, when directed by the secretary, shall notify the department a minimum of

two days before performing any soil sample collection activities or liner integrity testing.

(i) There shall be no deviation from plans and specifications submitted to and approved by the secretary, unless amended plans and specifications showing proposed changes have been submitted to the department and approved by the secretary.

(j) Each construction plan shall indicate the location of any active, abandoned, or plugged water, oil, gas, or salt solution mining well within 600 feet of any planned location for a swine waste-retention lagoon or pond. If the operator is unable to confirm the exact location of any well or wells, the construction plan shall contain a note indicating the potential for the well or wells to be located in the vicinity of any proposed swine waste-retention lagoon or pond. Each active, abandoned, or plugged water, oil, gas, or salt solution mining well that is encountered during construction and that was not identified or located on the construction plan shall be reported to the department within 48 hours of discovery. Construction activities that would impact the well or wells or that would be in the immediate vicinity of the well or wells shall be immediately terminated until the secretary determines that the appropriate steps, including plugging the well, have been taken to protect public health and the environment.

(k) Following the completion of the proposed construction or proposed expansion, if requested by the secretary, each swine operator shall certify that the swine waste management system or swine pollution control system, or both, were constructed in accordance with the plans approved by the secretary. If the swine operator utilized a professional engineer or consultant to monitor the construction of the swine waste management system or swine pollution control system, or both, then the certification shall also be signed by the professional engineer or the consultant who monitored the construction or installation of each system, including any swine waste-retention lagoon or pond liner. The certification shall be based on actual observations during construction and any field or laboratory data developed during or following construction. The certification shall be maintained on-site or at a central records location and shall be made available to the department, along with any supporting information, upon request. (Authorized by K.S.A. 2005 Supp. 65-171d and K.S.A. 65-1,181; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-171d,

and K.S.A. 65-1,181; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-13. Manure management plan for swine. (a) A manure management plan shall be developed and implemented for any proposed new swine facility, proposed expansion of an existing swine facility, or existing swine facility with an animal unit capacity of 1,000 or more, pursuant to L. 1998, ch. 143, sec. 5, and amendments thereto [K.S.A. 1998 Supp. 65-1,181 and amendments thereto]. When submitting manure management plans to the department for approval, each swine operator shall submit at least four copies of the plan.

(b) The manure management plan shall describe the methods for, and shall account for, the disposal of all swine or other process wastes generated by the swine facility. The plan shall include a description of the following:

(1) The source or sources and volume of swine or other process wastes generated by the swine facility;

(2) the method for collecting the swine or other process wastes by the swine facility;

(3) the manner in which the swine or other process wastes shall be directed to any treatment or storage system;

(4) a description of each treatment system utilized;

(5) a description of each storage system utilized;

(6) the location of any sites, including the legal description, where land application of swine or other process wastes will take place;

(7) the method of ultimate disposal or utilization of the swine or other process wastes; and

(8) the procedures to be employed and the information to be retained and provided, pursuant to L. 1998, ch. 143, sec. 5, and amendments thereto [K.S.A. 1998 Supp. 65-1,181, and amendments thereto], if swine or other process waste is to be sold or given to a person not employed by the facility and is to be disposed of by means other than land application on areas covered by the facility nutrient utilization plan.

(c) Each swine facility required to develop and implement a manure management plan shall amend the plan and submit the plan to the department for approval whenever specifically directed by the department or whenever warranted by one or more of the following:

(1) Changes in operation of the swine facility;

(2) a change or modification in the swine waste management or pollution control system; or

(3) other conditions affecting the swine facility, waste management system, or pollution control system.

(d) Whenever the operator of a swine facility required to develop a manure management plan does not own all the swine at the facility, the operator shall provide, as a part of the manure management plan, a copy of the executed contract with the owner of the swine that specifies responsibility for management of the swine or other process wastes, pursuant to L. 1998, ch. 143, sec. 5, and amendments thereto [K.S.A. 1998 Supp. 65-1,181 and amendments thereto].

(e) The manure management plan and any associated records, data, or other information shall be retained at the facility's site office, in a manner that is accessible to inspection by representatives of the department. The operator shall retain, at the facility's site office, the current and previous three years' versions of the plan and any associated records, data, or other information. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 5 and 14 [K.S.A. 1998 Supp. 65-1,181 and 65-1,191]; effective Jan. 15, 1999.)

28-18a-14. Nutrient utilization plan for swine. (a) A nutrient utilization plan shall be developed and implemented for each proposed new swine facility, proposed expansion of an existing swine facility, or existing swine facility with an animal unit capacity of 1,000 or more that applies swine or other process wastes to the land, pursuant to L. 1998, ch. 143, sec. 6, and amendments thereto [K.S.A. 1998 Supp. 65-1,182, and amendments thereto]. When submitting nutrient utilization plans to the department, each swine operator shall submit at least five copies of the plan.

(b) Each swine facility required to develop and implement a nutrient utilization plan shall amend the plan and submit the plan to the department whenever specifically directed by the department or whenever warranted by one or more of the following:

(1) Changes in operation of the swine facility;

(2) a change or modification in the swine waste management or pollution control system; or

(3) other conditions affecting the swine facility, waste management system, or pollution control system.

(c) The nutrient utilization plan and any associated records, data, or other information shall be retained at the facility's site office, in a manner that is accessible to inspection by representatives of the department. The operator shall retain, at the facility's site office, the current and previous five years' versions of the plan and any associated records, data, or other information. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 5 [K.S.A. 1998 Supp. 65-1,181]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 3, 5, 6, 9, and 14 [K.S.A. 1998 Supp. 65-1,179, 65-1,181, 65-1,182, 65-1,185, and 65-1,191]; effective Jan. 15, 1999.)

28-18a-15. Odor control plan for swine.

(a) An odor control plan shall be developed for each proposed new swine facility, proposed expansion of an existing swine facility, or existing swine facility with an animal unit capacity of 1,000 or more, pursuant to L. 1998, ch. 143, sec. 11, and amendments thereto [K.S.A. 1998 Supp. 65-1,187, and amendments thereto]. When submitting odor control plans to the department for approval, each swine operator shall submit at least four copies of the plan.

(b) Each swine facility required to develop and implement an odor control plan shall amend the plan and submit the plan to the department for approval, whenever specifically directed by the department or whenever warranted by one or more of the following:

(1) Changes in operation of the swine facility;

(2) a change or modification in the swine waste management or pollution control system; or

(3) other conditions affecting the swine facility, waste management system, or pollution control system.

(c) Each operator of a swine facility shall implement the approved odor control plan consistent with any schedule of compliance established in the permit.

(d) The type and layout design of any vegetative

screening utilized to minimize or control odors shall be approved by the department.

(e) The odor control plan and any associated records, data, or other information shall be retained at the facility's site office, in a manner that is accessible to inspection by representatives of the department. The operator shall retain, at the facility's site office, the current and previous three years' versions of the plan and any associated records, data, or other information. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 11 [K.S.A. 1998 Supp. 65-1,187]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 11 and 14; [K.S.A. 1998 Supp. 65-1,187 and 65-1,191]; effective Jan. 15, 1999.)

28-18a-16. Emergency response plan for swine. (a) An emergency response plan shall be developed and implemented for each proposed new swine facility, proposed expansion for an existing swine facility, or existing swine facility with an animal unit capacity of 1,000 or more, pursuant to L. 1998, ch. 143, sec. 8, and amendments thereto [K.S.A. 1998 Supp. 65-1,184, and amendments thereto]. When submitting emergency response plans to the department for approval, each swine operator shall submit at least four copies of the plan.

(b) The emergency response plan for swine shall include, at a minimum, the following information:

(1) A description of potential sources, activities, and materials that may reasonably be expected to or could potentially result in pollution from an unauthorized discharge, spill, or release of swine or other wastes from the swine facility;

(2) a map, indicating an outline of the potential discharge area of the facility and existing structural control measures designed to contain or control any unauthorized discharge, spill, or release of swine or other process wastes from the swine facility;

(3) a spill contingency plan for swine or other process wastes;

(4) procedures for notification of the department;

(5) procedures to mitigate any adverse impacts of the emergency event; and

(6) training requirements for employees or contractors.

(c) Each swine facility required to develop and implement an emergency response plan shall amend the plan and submit the plan to the department for approval, whenever specifically directed by the department or whenever warranted by one or more of the following:

(1) Changes in operation of the swine facility;

(2) a change or modification in the animal or swine waste management system; or

(3) other conditions affecting the swine facility, waste management system, or pollution control system.

(d) The swine operator shall provide for and keep current the training of employees and contractors who are responsible for implementing the plan.

(e) The emergency response plan and any associated records, data, or other information shall be retained at the facility's site office, in a manner that is accessible to inspection by representatives of the department. The operator shall retain, at the facility's site office, the current and previous three years' versions for the plan and any associated records, data, or other information.

(f) A copy of the emergency response plan shall be maintained at the facility, in a location readily accessible to all employees or contractors responsible for implementing the plan. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 8 [K.S.A. 1998 Supp. 65-1,184]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 8 and 14 [K.S.A. 1998 Supp. 65-1,184 and 65-1,191]; effective Jan. 15, 1999.)

28-18a-17. Dead swine handling plan.

(a) A dead swine handling plan shall be developed and implemented for each proposed new swine facility, proposed expansion of an existing swine facility, or existing swine facility with an animal unit capacity of 1,000 or more, pursuant to L. 1998, ch. 143, sec. 17, and amendments thereto [K.S.A. 1998 Supp. 65-1,188, and amendments thereto]. When submitting dead swine handling plans to the department for approval, each swine operator shall submit at least four copies of the plan.

(b) The dead swine handling plan shall include, at a minimum, the following information:

(1) A description of how dead swine are to be handled before disposal, to decrease the possibility of spreading disease and preclude contamination of waters of the state. The description shall address the handling of carcasses associated with both normal mortality and a major disease outbreak or other situation that results in deaths significantly higher than normal mortality;

(2) the method of and location or locations at the facility to be utilized for temporary storage of the swine carcasses;

(3) the ultimate method or methods of disposal that will be utilized for the facility, including burial, rendering, incineration, composting or other methods as approved by the Kansas animal health department;

(4) procedures to be utilized to minimize the potential for pests and odors; and

(5) training requirements for employees and contractors.

(c) Each swine facility required to develop and implement a dead swine handling plan shall amend the plan and submit the plan to the department for approval whenever specifically directed by the department or whenever warranted by one or more of the following:

(1) Changes in operation of the swine facility;

(2) a change or modification in the swine waste management or pollution control system; or

(3) other conditions affecting the swine facility, waste management system, or pollution control system.

(d) The handling of dead swine shall be consistent with the provisions in L. 1998, ch. 143, sec. 17, and amendments thereto. [K.S.A. 1998 Supp. 65-1,188, and amendments thereto]

(e) The operator shall provide for and keep current the training of employees and contractors who are responsible for implementing the plan.

(f) The dead swine handling plan and any associated records, data, or other information shall be retained at the facility's site office, in a manner that is accessible to inspection by representatives of the department. The operator shall retain, at the facility's site office, the current and previous three years' versions of the plan and any associated records, data, or other information.

(g) A copy of the dead swine handling plan shall be maintained at the facility at a location readily accessible to all employees or contractors who are responsible for implementing the plan.

(h) The disposal of dead swine shall be conducted in conformance with the provisions of, and regulations adopted pursuant to, K.S.A. 47-1201, et seq., and amendments thereto. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 17 [K.S.A. 1998 Supp. 65-1,188]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 14 and 17 [K.S.A. 1998 Supp. 65-1,191 and 65-1,188]; effective Jan. 15, 1999.)

28-18a-18. Groundwater monitoring for swine facilities.

(a) The installation and sampling of groundwater monitoring wells shall be conducted pursuant to L. 1998, ch. 143, secs. 4 and 5, and amendments thereto [K.S.A. 65-1,180 and 65-1,181, and amendments thereto].

(b) Any swine facility shall, when required by the department, provide for the installation and sampling of groundwater monitoring wells or the sampling of existing wells in the vicinity of waste-retention lagoons or ponds, waste treatment systems, land application sites, or other areas either known to be or potentially impacted by swine or other process wastes, or where warranted by groundwater, geologic, or construction conditions.

(c) Where a groundwater monitoring system is required by the department, the proposed location and design of the monitoring wells shall be approved by the department before being constructed.

(d) All water supply or groundwater monitoring wells shall be constructed by a water well contractor or driller licensed in Kansas, in conformance with regulations adopted pursuant to the Kansas groundwater exploration and protection act, K.S.A. 82a-1201 et seq., and amendments thereto.

(e) For the construction of a new swine facility, groundwater monitoring wells shall be sampled and analyzed to establish background concentrations of chemical parameters designated by the department before the facility is populated. For the installation of monitoring wells at existing facilities, each monitoring well shall be monitored within two months of installation to establish a baseline for the chemical parameters designated by the department.

(f) Background, baseline, and other data from monitoring wells shall be maintained for the life of the facility. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 65-169, 65-170, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, secs. 4 and 5 [K.S.A. 1998 Supp. 65-1,180 and 65-1,181]; effective Jan. 15, 1999.)

28-18a-19. Operation of swine waste management and swine pollution control systems. (a) Each swine waste management system and swine pollution control system shall be designed, constructed, maintained, and operated to prevent pollution of waters of the state and to protect public health and the environment.

(b) Each swine waste management system and each swine pollution control system shall be operated according to the plans approved by the secretary.

(c) When a liner is installed or constructed, the operator shall maintain the liner to comply with the minimum standards of design, construction, and maintenance. When soil liners are utilized, no trees or other deep-rooted vegetation shall be allowed to grow within 100 feet of the liner. Any mechanical or structural damage to the liner shall be reported to the department within two work-days of identification and shall be repaired in a time frame approved by the secretary and designed to protect public health and the environment.

(d) Each operator shall haul or transport swine or process wastes to land application sites in a manner that prevents loss or spillage during transport.

(e) When land application of swine or other process wastes is practiced, the application shall be conducted at agronomic rates.

(f) Irrigation practices shall be managed to minimize ponding or puddling of swine or other process wastes at the land application site. Irrigation practices shall be managed to ensure that swine or other process wastes are not discharged from the application sites.

(g) Adequate equipment and land application areas shall be available for removal of swine or other process wastes and contaminated storm wa-

ter runoff from the swine facility to comply with the provisions of the permit and these regulations.

(h) (1) Unless approved in advance by the secretary, liquid waste, concentrated liquid swine waste, or other liquid process waste shall not be land applied when the ground is frozen, snow-covered, or saturated, or during a precipitation event. Land application of swine or other process wastes during these periods may be authorized by the secretary for use in filtering swine or other process wastes from retention structures that are properly operated and maintained and that are in imminent danger of overflow to surface waters of the state due to a chronic or catastrophic precipitation event.

(2) Solid swine or other process wastes may be applied to frozen ground only if the proposed application site and practices ensure that the wastes will be retained at the application site.

(i) (1) Each swine operator, as required by the facility permit issued by the secretary, shall conduct sampling and analysis of swine or process wastes or sites utilized for the application of swine or process wastes from confined swine feeding facilities, to determine nutrient and salinity levels, to confirm utilization of the swine or process wastes at agronomic rates, and to ensure that public health and the environment are protected.

(2) (A) Each swine operator of a swine facility with 999 animal units or less shall sample the soil of each field identified in the waste management plan for the swine facility if both of the following conditions are met:

(i) The field is identified by KDHE as located in a sensitive groundwater area or over the Equus Beds.

(ii) The field has received manure or wastewater in one or more of the previous five years.

(B) The sampling and analysis shall be conducted in accordance with the procedures approved by the secretary. The test results shall be sent to the department within 30 days of receipt of the test results.

(3) Each swine operator required to obtain a federal permit shall conduct soil and waste sampling and analysis in accordance with the nutrient management plan. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-171d, K.S.A. 65-171h, and K.S.A. 65-1,181; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-20. Denial, suspension, revoca-

tion, or termination of a permit or certification for swine facilities. (a) A permit or certification may be denied, suspended, revoked, or terminated, pursuant to K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, L. 1998, ch. 143, sec. 16, and amendments thereto [K.S.A. 1998 Supp. 65-171d, K.S.A. 1998 Supp. 65-1,193, and amendments thereto].

(b) A permit or certification may be denied, suspended, revoked, or terminated for any of the following reasons:

(1) Misrepresentation or omission of a significant fact by the swine operator, either in the application for the permit or in information subsequently reported to the department;

(2) improper operation of the confined feeding facility, swine waste management system, or pollution control system, including any land application areas that cause pollution or a public health hazard;

(3) violation of any provision of K.S.A. 65-159 et seq. and amendments thereto, any regulations of article 16 and article 18, or other restrictions set forth in the permit, certification, or waiver; or

(4) failure to comply with an order or modified permit issued by the secretary.

(c) Procedures and provisions for the denial, suspension, revocation, or termination of a permit shall be pursuant to the provisions of K.A.R. 28-16-62.

(d) Any swine operator aggrieved by the denial, suspension, revocation, or termination of a permit or certification may request a hearing in accordance with the provisions of the Kansas administrative procedure act, K.S.A. 77-501 et seq. and amendments thereto.

(e) If a confined feeding facility is required to terminate operations or reduce the number of animal units at the facility, the swine operator may be allowed by the secretary to finish feeding existing swine at the facility at the time of notification by the department, until the facility is permitted or certified, or complies with the provisions of these regulations. However, in no case shall the termination of operations or the reduction of the animal unit number exceed five months from the initial notification to terminate operations by the department. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-

171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, sec. 16 [K.S.A. 1998 Supp. 65-1,193]; effective Jan. 15, 1999.)

28-18a-21. Inspections. (a) Each swine operator shall provide all necessary specialized equipment, clothing, or appurtenances to enable a department inspector to enter the facility for inspection.

(b) Each swine operator that develops or modifies the biosecurity protocols and that requests KDHE conformance with the protocols shall submit a copy of the protocols to the department within 30 days of establishing or modifying the biosecurity protocols.

(c) If any department inspector conducting an inspection of a confined feeding facility complies with the facility's biosecurity protocol, that inspector shall be allowed to access the animal waste management system to conduct inspections. Biosecurity protocols shall not restrict the reasonable access of any department inspector. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-1,191; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-22. Swine facility closure requirements. (a) Each swine operator of a swine facility permitted by the department shall notify the department of any plans to cease operation of, close, or abandon the swine facility.

(b) Each swine operator shall maintain and comply with a valid water pollution control permit for the swine facility until closure of the swine facility is complete and all materials representing a threat to public health and the environment are removed.

(c)(1) Each permit applicant for each proposed new swine facility or new swine waste-retention lagoon or pond, proposed expansion of an existing swine facility, or proposed expansion of an existing swine waste-retention lagoon or pond shall develop and implement a swine facility closure plan or swine waste-retention lagoon or pond closure plan if either of the following conditions is met:

(A) (i) The new swine facility or expanded swine facility is proposed to have an animal unit capacity of 1,000 or more; and

(ii) the swine facility is proposed to be located over the Equus Beds; or

(B) The new swine facility, existing swine facil-

ity, or proposed expanded swine facility will have an animal unit capacity of 3,725 or more.

(2) Each swine operator of any existing swine facility or swine waste-retention lagoon or pond without a current swine facility or swine waste-retention lagoon or pond closure plan shall develop and implement a closure plan for the swine facility or swine waste-retention lagoon or pond if both of the following conditions are met:

(A) The existing swine facility has an animal unit capacity of 1,000 or more.

(B) The existing swine facility is located over the Equus Beds. The swine facility or swine waste-retention lagoon or pond closure plan shall be developed and submitted to the department with the next application for permit renewal or modification for the existing swine facility.

(d) When submitting a swine facility or swine waste-retention lagoon or pond closure plan to the department, each swine operator shall submit at least four copies of the plan.

(e) A swine facility or swine waste-retention lagoon or pond closure plan shall include, at a minimum, the following:

(1) A description of all swine waste management and swine pollution control system components utilized to contain, control, or store swine or other process wastes at the swine facility;

(2) a description of the procedures to be employed to remove and dispose of swine or other process wastes;

(3) a description of the maintenance, deactivation, conversion, or demolition of all swine waste-retention lagoons or ponds at the swine facility pursuant to K.S.A. 65-1,190, and amendments thereto, or the closure of any swine waste-retention lagoon or pond by one of the following methods:

(A) Removing the berms, and leveling and revegetating the site to provide erosion control;

(B) leaving the structure or structures in place for use as a freshwater farm pond or reservoir;

(C) retaining the structure or structures for future use as a part of a swine waste management or pollution control system; or

(D) using any other method approved by the secretary; and

(4) a description of, and detailed drawings for, the plugging of any water or groundwater monitoring wells at the swine facility.

(f) Each swine operator of a swine facility required to have a swine facility closure plan and a swine waste-retention lagoon or pond closure plan

shall amend each plan and submit the amended plans to the department for approval whenever specifically directed by the secretary or whenever warranted by one or more of the following:

(1) Any significant changes in operation of the swine facility;

(2) any significant change or modification in the swine waste management or swine pollution control systems; or

(3) any other significant conditions affecting the swine facility, swine waste management system, or swine pollution control system.

(g) Each operator of a swine facility that is required to develop a swine facility or swine waste-retention lagoon or pond closure plan shall retain the current plan at the site office of the facility or at a central records location, in a manner that is accessible to inspection by representatives of the department.

(h) The closure of a swine facility or swine waste-retention lagoon or pond shall be completed within six months of notification to the department of the proposed closure of the facility or termination of operations.

(i) Each swine operator seeking an extension of time for closure shall submit a written request to the secretary. The request shall detail the reasons for the extension. Only weather conditions or the legal change in ownership of the swine facility shall be grounds for the secretary to consider granting an extension.

(j) If the operator of a swine facility is unwilling or unable to properly close the swine facility, the owner of swine at the swine facility and the property owner shall be responsible for closing the swine facility in accordance with these regulations and in a manner that protects the waters of the state, public health, and the environment. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, 65-165, 65-166, K.S.A. 2005 Supp. 65-171d, K.S.A. 65-1,189 and 65-1,190; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-23. Financial assurance for swine facility closure.

(a) On or before July 1, 1999 and annually thereafter before January 1 of each year, each operator of a swine facility with an animal unit capacity of 3,725 or more shall provide evidence, satisfactory to the department, that the operator has the financial ability to cover the cost of closure of the swine facility, as required by the department.

(b) For new construction or new expansion of a swine facility with a proposed animal unit capacity of 3,725 or more, the swine operator shall provide evidence, satisfactory to the department, that the operator has the financial ability to cover the cost of closure of the proposed new construction or expansion at the time the application is submitted to the department for review.

(c) Each operator of a swine facility with an animal unit capacity of 3,725 or more shall submit, as a part of the evidence provided to the department, a detailed written estimate in current dollars of the cost to close the swine facility in a manner acceptable to the department. The estimate shall be prepared by a professional engineer or consultant approved by the department.

(d) Each operator shall develop an estimate of the cost to close the swine facility as follows:

(1) The estimate shall be based on the cost charged by a third party to collect and dispose of all swine or other process wastes stored or retained at the swine facility, excluding the swine waste-retention lagoons or ponds, at a specifically identified off-site application area.

(2) All waste management and pollution control system components shall be assumed to be at maximum capacity.

(3) The costs attributable to the swine waste-retention lagoons or ponds shall be excluded from the estimate.

(e) Each swine operator shall increase the closure cost estimate and the amount of financial assurance provided if any change in the facility closure plan or in operation increases the maximum cost of closure at any time.

(f) Each swine operator shall provide continuous financial assurance coverage for closure until the department determines the facility closure to be acceptable.

(g) Mechanisms used to demonstrate financial assurance shall ensure that the funds necessary to meet the cost to close the swine facility, pursuant to K.A.R. 28-18-22 (d), are accessible to the department in a timely fashion when needed. In establishing financial assurance for the facility closure, swine operators shall utilize any of the following options:

- (1) Trust fund;
- (2) surety bond guaranteeing payment or performance;
- (3) letter of credit;
- (4) insurance;
- (5) self-insurance; or

(6) use of multiple mechanisms.

(h) Each operator that utilizes a trust fund shall meet the following requirements.

(1) Provide for a trustee. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. A copy of the trust agreement shall be provided to the department.

(2) Provide authority for the department or person authorized by the department to implement the closure to request and obtain from the trustee reimbursement for closure expenditures. Requests for reimbursement shall be granted by the trustee, to the limit of the funds in the trust fund and proper documentation of the incurred costs are provided.

(3) Maintain the trust fund. The operator shall maintain the trust fund until an alternative financial assurance mechanism is approved by the department and is in place, or shall cease operations and close out the facility before the trust fund is terminated or if the operator is no longer required to demonstrate financial responsibility.

(i) Each swine operator that utilizes a surety bond guaranteeing payment or performance shall meet all of the following requirements:

(1) Obtain a surety bond, with the penal sum of the bond in an amount at least equal to the estimated facility closure cost;

(2) provide the department with a copy of the bond;

(3) obtain the bond from a company that is licensed to issue bonds in Kansas;

(4) provide in the bond that the surety shall become liable on the bond obligation when the operator fails to perform as guaranteed by the bond;

(5) establish a standby trust fund;

(6) provide that payments made under the terms of the bond shall be deposited by the surety directly into the standby trust fund. Payments from the trust fund shall be made by the trustee to the limit of the bond amount when proper documentation of the incurred costs are provided; and

(7) obtain a bond providing that the surety may cancel the bond by sending notice of cancellation by certified mail to the operator and the department at least 120 days in advance of the cancellation. If the surety cancels the bond, the facility shall obtain alternative financial assurance before the cancellation or shall cease operations and close out the facility before the cancellation date

of the bond, unless the operator is no longer required to demonstrate financial responsibility.

(j) Each swine operator that utilizes a letter of credit shall meet the following requirements:

(1) Obtain an irrevocable standby letter of credit by which the issuing institution shall be an entity that has authority to issue letters of credit and whose letter of credit operations are regulated by a federal or state agency. The letter of credit shall be in a form that constitutes an unconditional promise to pay and shall be in a form negotiable by the department;

(2) provide the department with a copy of the letter of credit. Information contained in the letter of credit or provided by the operator shall include the name, location, and permit number of the facility and the amount of funds assured;

(3) provide an irrevocable letter of credit issued for a period of at least one year in an amount at least equal to the current cost estimate for closure of the facility. The letter of credit shall provide that the expiration date shall be automatically extended for a period of at least one year, unless the issuing institution has canceled the letter of credit by sending notice of cancellation by certified mail to the operator and department 120 days in advance of cancellation. If the letter of credit is canceled by the issuing institution, the owner shall obtain alternative financial assurance before the cancellation or shall cease operations and close out the facility before the cancellation date of the letter of credit, unless the operator is no longer required to demonstrate financial responsibility; and

(4) cancel the letter of credit only if alternative financial assurance, approved by the department, is substituted or if the operator is no longer required to demonstrate financial responsibility.

(k) Each operator that utilizes insurance shall meet all of the following requirements:

(1) Obtain insurance coverage for a period of at least one year in an amount at least equal to the current cost estimate for closure of the facility;

(2) obtain insurance from an insurer authorized to sell insurance in Kansas;

(3) provide the department with a copy of the insurance policy;

(4) ensure that the insurance policy guarantees that funds shall be available to close the facility in the event the operator is unable or unwilling to close the facility in accordance with the facility closure plan approved by the department;

(5) ensure that the insurance policy provides

that the insurer is responsible for the payment of the department or person authorized to close the facility. Payments by the insurer for the policy shall be made by the insurer to the limit of the policy amount when proper documentation of the incurred costs are provided;

(6) ensure that the insurance policy provides that the insurer cannot cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the operator and the department 120 days in advance of the cancellation;

(7) if the insurer cancels the policy, obtain alternative financial assurance before the cancellation, or cease operations and close out the facility before the cancellation date of the insurance policy, unless the operator is no longer required to demonstrate financial responsibility; and

(8) cancel the insurance policy only if alternative financial assurance, approved by the department, is substituted or if the operator is no longer required to demonstrate financial responsibility.

(l) To establish evidence of financial ability for self-insurance, each swine operator shall meet the following requirements:

(1) Submit a financial statement, prepared by a certified public accountant, listing tangible assets and total liabilities of the swine operator. The assets shall not include the value of the swine at the facility. The financial statement shall include a general release, by the swine operator, providing the department with authorization for verification with banks or other financial institutions; and

(2) provide an indication on the financial statement of whether or not the tangible assets, less the total liabilities, are satisfactory to cover the estimated cost of closure. The financial statement shall note the estimated cost of closure utilized.

(m) Each swine operator that utilizes multiple financial assurance mechanisms shall meet the following requirements:

(1) Use only the financial assurance mechanisms provided for in this regulation; and

(2) provide that the total coverage of all the financial mechanisms utilized provides an amount at least equal to the current cost estimate for closure of the facility. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143,

sec. 1; implementing L. 1998, ch. 143, sec. 12 [K.S.A. 1998 Supp. 65-1,189]; effective Jan. 15, 1999.)

28-18a-24. Financial assurance for swine waste-retention lagoon or pond closure. (a) On or after July 1, 2000 and annually thereafter before January 1 each year, each operator of a swine facility with an animal unit capacity of 3,725 or more that utilizes swine waste-retention lagoons or ponds shall provide evidence, satisfactory to the department, that the operator has the financial ability to cover the cost of closure of the swine waste-retention lagoons or ponds as required by the department.

(b) For new construction or new expansion of a swine facility with a proposed animal unit capacity of 3,725 or more that employs the use of swine waste-retention lagoons or ponds, the swine operator shall provide evidence, satisfactory to the department, that the operator has the financial ability to cover the cost of closure of the proposed swine waste-retention lagoons or ponds at the time the application is submitted to the department for review.

(c) Each operator of swine facility with an animal unit capacity of 3,725 or more shall submit, as a part of the evidence provided to the department, a detailed written estimate in current dollars of the cost to close the swine waste-retention lagoons or ponds in a manner acceptable to the department. The estimate shall be prepared by a professional engineer or consultant approved by the department.

(d) To estimate the cost to close the swine waste-retention lagoons or ponds, the swine operator shall consider the following:

(1) The cost of the swine waste-retention lagoons or ponds closure by determining the cost of a third party to collect and dispose of all swine or other process wastes stored or retained on-site in the lagoons or ponds at a specifically identified off-site application area; and

(2) all swine waste-retention lagoons or ponds to be 100 percent full, for the purpose of estimating costs.

(e) Each swine operator shall increase the closure cost estimate and the amount of financial assurance provided if changes in the facility closure plan addressing the swine waste-retention lagoons or ponds or a change in operation increase the maximum cost of closure at any time.

(f) Each swine operator shall provide continu-

ous coverage for closure until the department determines the closure of the swine waste-retention lagoons or ponds to be acceptable.

(g) Mechanisms used to demonstrate financial assurance shall ensure that the funds necessary to meet the cost to close the swine waste-retention lagoons or ponds, pursuant to K.A.R. 28-18-22 (d), are accessible to the department in a timely fashion when needed. In establishing financial assurance for the swine waste-retention lagoons or ponds closure, swine operators shall utilize one of the following options:

(1) Trust fund;

(2) surety bond guaranteeing payment or performance;

(3) letter of credit;

(4) insurance;

(5) self-insurance; or

(6) use of multiple mechanisms.

(h) Each swine operator that utilizes a trust fund shall meet the following requirements.

(1) Provide for a trustee. The trustee shall be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. A copy of the trust agreement shall be provided to the department.

(2) Provide authority for the department or person authorized by the department to implement the closure to request and obtain from the trustee reimbursement for closure expenditures. Requests for reimbursement shall be granted by the trustee, to the limit of the funds in the trust fund and proper documentation of the incurred costs are provided.

(3) Maintain the trust fund. The swine operator shall maintain the trust fund until an alternative financial assurance mechanism is approved by the department and is in place, or shall cease operations and close out the swine waste-retention lagoons or ponds before the trust fund is terminated or if the operator is no longer required to demonstrate financial responsibility.

(i) Each swine operator that utilizes a surety bond guaranteeing payment or performance shall meet all of the following requirements:

(1) Obtain a surety bond, with the penal sum of the bond in an amount at least equal to the estimated swine waste-retention lagoons or ponds closure cost;

(2) provide the department with a copy of the bond;

(3) obtain the bond from a company that is licensed to issue bonds in Kansas;

(4) provide in the bond that the surety becomes liable on the bond obligation when the operator fails to perform as guaranteed by the bond;

(5) establish a standby trust fund;

(6) provide that payments made under the terms of the bond will be deposited by the surety directly into the standby trust fund. Payments from the trust fund shall be made by the trustee to the limit of the bond amount when proper documentation of the incurred costs is provided; and

(7) obtain a bond providing that the surety may cancel the bond by sending notice of cancellation by certified mail to the operator and the department at least 120 days in advance of the cancellation. If the surety cancels the bond, the operator shall obtain alternative financial assurance before the cancellation, or shall cease operations and close out the swine waste-retention lagoons or ponds before the cancellation date of the bond, unless the operator is no longer required to demonstrate financial responsibility.

(j) Each swine operator that utilizes a letter of credit shall meet the following requirements:

(1) Obtain an irrevocable standby letter of credit by which the issuing institution shall be an entity that has authority to issue letters of credit and whose letter of credit operations are regulated by a federal or state agency. The letter of credit shall be in a form that constitutes an unconditional promise to pay and shall be in a form negotiable by the department;

(2) provide the department with a copy of the letter of credit. Information contained in the letter of credit or provided by the operator shall include the name, location, and permit number of the facility and the amount of funds assured;

(3) provide an irrevocable letter of credit issued for a period of at least one year in an amount at least equal to the current cost estimate for closure of the swine waste-retention lagoons or ponds. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless the issuing institution has canceled the letter of credit by sending notice of cancellation by certified mail to the operator and department 120 days in advance of cancellation. If the letter of credit is canceled by the issuing institution, the owner shall obtain alternative financial assurance before the cancellation, or shall cease operations and close out the swine waste-retention lagoons or ponds before the can-

cellation date of the letter of credit, unless the operator is no longer required to demonstrate financial responsibility; and

(4) cancel the letter of credit only if alternative financial assurance, approved by the department, is substituted or if the operator is no longer required to demonstrate financial responsibility.

(k) Each swine operator that utilizes insurance shall meet all of the following requirements:

(1) Obtain insurance coverage for a period of at least one year in an amount at least equal to the current cost estimate for closure of the swine waste-retention lagoons or ponds;

(2) obtain insurance from an insurer authorized to sell insurance in Kansas;

(3) provide the department with a copy of the insurance policy;

(4) ensure that the insurance policy guarantees that funds shall be available to close the swine waste-retention lagoons or ponds if the operator is unable or unwilling to close the swine waste-retention lagoons or ponds in accordance with the facility closure plan approved by the department;

(5) ensure that the insurance policy provides that the insurer is responsible for the payment of the department or person authorized to close the swine waste-retention lagoons or ponds. Payments by the insurer for the policy shall be made by the insurer to the limit of the policy amount when proper documentation of the incurred costs is provided;

(6) ensure that the insurance policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the operator and the department 120 days in advance of the cancellation;

(7) if the insurer cancels the policy, obtain alternative financial assurance before the cancellation, or cease operations and close out the swine waste-retention lagoons or ponds before the cancellation date of the insurance policy, unless the operator is no longer required to demonstrate financial responsibility; and

(8) cancel the insurance policy only if alternative financial assurance, approved by the department, is substituted or if the operator is no longer required to demonstrate financial responsibility.

(l) To establish evidence of financial ability for self-insurance, each operator shall meet the following requirements:

(1) Submit a financial statement, prepared by a certified public accountant, listing tangible assets and total liabilities of the swine operator. The assets shall not include the value of the swine at the facility. The financial statement shall include a general release, by the swine operator, providing the department authorization for verification with banks or other financial institutions; and

(2) provide the indication, on the financial statement, of whether or not the tangible assets, less the total liabilities, are satisfactory to cover the estimated cost of closure. The financial statement shall note the estimated cost of closure utilized.

(m) Each operator that utilizes multiple financial assurance mechanisms shall meet both of the following requirements:

(1) Use only the financial assurance mechanisms provided for in this regulation; and

(2) provide that the total coverage of all the financial mechanisms utilized provides an amount at least equal to the current cost estimate for closure of the swine waste-retention lagoons or ponds. (Authorized by and implementing K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 13 [K.S.A. 1998 Supp. 65-1,190]; effective Jan. 15, 1999.)

28-18a-25. Variance of specific requirements. (a) Each swine operator seeking a variance from the regulations in this article shall submit to the department a written request for variance from the regulations in this article and shall provide information relevant to the request.

(b) Each request shall specifically set forth why the variance should be considered and how the requested variance addresses the intent of this article.

(c) A variance may be granted by the department whenever site-specific conditions or proposals are in keeping with the purpose and intent of this article. (Authorized by and implementing K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, and K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1; effective Jan. 15, 1999.)

28-18a-26. Requirements for swine facility operator certification. Each operator of a swine facility with an animal unit capacity of 1,000 or more that is required to have a permit shall obtain a swine waste management and swine pol-

lution control system operator certificate. Each swine operator that desires or is required to obtain a swine facility operator certificate shall meet the following requirements:

(a) Each applicant shall be a swine facility operator who maintains or supervises a swine waste management or swine pollution control system.

(b) Each swine facility operator shall submit a complete application and the appropriate fee to the department. The application shall be received by the department at least two weeks before the scheduled examination date. Late applications shall not be accepted for the scheduled examination date.

(c) If an applicant provides false information on an application, the applicant shall not be accepted for examination, and the fee submitted with the application shall not be returned to the applicant. The applicant shall be notified of the decision denying acceptance for examination and shall not be allowed to take the examination for two consecutive years. (Authorized by K.S.A. 2003 Supp. 65-171d, K.S.A. 65-1,183, and K.S.A. 65-4512; implementing K.S.A. 65-1,183, 65-1,186, and 65-4512; effective Jan. 15, 1999; amended March 16, 2007.)

28-18a-27. Eligibility for swine facility operator certification. (a) Each applicant for certification shall meet the following requirements:

(1) Submit a completed application, on forms provided by the department and with the appropriate fees; and

(2) complete six hours of training, as approved by the department.

(b) Certified swine operators shall acquire a minimum of six hours of approved training every five years as a condition for renewal of the certification. (Authorized by K.S.A. 65-4512, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 7 [K.S.A. 1998 Supp. 65-1,183]; implementing L. 1998, ch. 143, secs. 7 and 10 [K.S.A. 1998 Supp. 65-1,183 and 65-1,186]; effective Jan. 15, 1999.)

28-18a-28. Swine facility operator certification examinations. (a) Each applicant for a swine facility operator certificate shall pass a written examination administered by the department or a designee.

(b) Each swine operator who seeks to obtain a swine facility operator certification and who has allowed a certificate to lapse for a period of two

years or more shall submit an application and fee, receive at least six hours of approved training, and pass a written examination. (Authorized by K.S.A. 65-4512, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 7 [K.S.A. 1998 Supp. 65-1,183]; implementing L. 1998, ch. 143, secs. 7 and 10 [K.S.A. 1998 Supp. 65-1,183 and 65-1,186]; effective Jan. 15, 1999.)

28-18a-29. Noncertified operators responsible for the operation and management of swine facilities, swine waste management systems, or pollution control systems. (a) Each noncertified operator of a new or proposed swine facility with an animal unit capacity of 1,000 or more shall notify the department within 30 days of the initial start-up of the facility that the operator is the designated facility operator. The operator shall be designated as an “operator in training (OIT).” The operator shall obtain six hours of approved training and shall obtain the certification within one year of the notification to KDHE. Each noncertified operator of a swine facility with an animal unit capacity of 1,000 or more shall notify the department within 30 days of assuming responsibility for the operation of the swine facility.

(b) The OIT designation shall be renewed only once, if it is demonstrated to the department that the operator is attending training sessions or studying correspondence courses in preparation to retake the examination. (Authorized by K.S.A. 65-4512, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 7 [K.S.A. 1998 Supp. 65-1,183]; implementing L. 1998, ch. 143, secs. 7 and 10 [K.S.A. 1998 Supp. 65-1,183 and 65-1,186]; effective Jan. 15, 1999.)

28-18a-30. Issuance of certificate of competency. (a) Upon fulfillment of the requirements in K.A.R. 28-18-26, 28-18-27, and 28-18-28, a certificate shall be issued to the applicant. The certificate shall designate that the swine operator is qualified to operate and maintain a swine facility, swine waste management system, and pollution control system. This certificate shall be effective for five years from the date of issuance.

(b) A certificate may be issued, through reciprocity, to an applicant who has been issued a swine operator, or equivalent, certification in another state when the department determines that the standards for training and certification meet

or exceed the requirements of the department. The swine operator shall provide any information that the department requires to determine whether or not a certificate may be issued through reciprocity. (Authorized by K.S.A. 65-4504, K.S.A. 65-4512, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 7 [K.S.A. 1998 Supp. 65-1,183]; implementing L. 1998, ch. 143, secs. 7 and 10 [K.S.A. 1998 Supp. 65-1,183 and 65-1,186]; effective Jan. 15, 1999.)

28-18a-31. Swine operator certification fees. (a) Fees for swine operator certification shall be as follows:

(1) Operator in training (one-year certificate)	No charge
(2) operator in training (renewal of one year)	\$5.00
(3) examination fee	\$25.00
(4) five-year renewal of certificates	\$50.00
(5) reinstatement of lapsed certificate up to one year after renewal date	\$70.00
(6) reinstatement of lapsed certificate between one and two years after renewal date	\$80.00
(7) reciprocity fee	\$65.00

(b) Fees from applicants who are ineligible to take the certification examination, for reasons other than providing false information on the application, shall be returned.

(c) Fees from applicants who fail the examination shall not be returned.

(d) Each operator required to retake an examination shall submit a new application and fee.

(e) Fees for department-sponsored training sessions shall be established by the department. (Authorized by K.S.A. 65-4504, K.S.A. 65-4512, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 7 [K.S.A. 1998 Supp. 65-1,183]; implementing L. 1998, ch. 143, secs. 7 and 10 [K.S.A. 1998 Supp. 65-1,183 and 65-1,186]; effective Jan. 15, 1999.)

28-18a-32. (Authorized by K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, and L. 1998, ch. 143, sec. 5 [K.S.A. 1998 Supp. 65-1,181]; implementing K.S.A. 1997 Supp. 65-164, K.S.A. 1997 Supp. 65-165, as amended by L. 1998, ch. 62, sec. 1, K.S.A. 65-166, K.S.A. 1997 Supp. 65-166a, K.S.A. 1997 Supp. 65-171d, as amended by L. 1998, ch. 143, sec. 1, K.S.A. 65-171h, and L. 1998, ch. 143, sec. 5 [K.S.A. 1998 Supp. 65-1,181]; effective Jan. 15, 1999; revoked March 16, 2007.)

28-18a-33. Groundwater protection requirements for swine waste-retention lagoons or ponds, swine waste management systems, and waste treatment facilities. (a) The provisions of this article shall not apply to any permitted swine waste-retention lagoon or pond or swine waste management system, or waste treatment facility that is in existence or that the secretary approved for construction before the effective date of this regulation, unless information becomes available showing that the swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility presents an imminent threat to public health or the environment.

(b)(1) The provisions of this article shall not apply to any existing or proposed swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility located at a swine facility if all of the following conditions are met:

(A) The swine facility existed on July 1, 1994 and is still in existence as defined in K.S.A. 65-1,178, and amendments thereto.

(B) The swine operator registered the swine facility with the secretary before July 1, 1996.

(C) The capacity of the existing or proposed swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility is no larger than that necessary to serve the facility as described in the registration application submitted before July 1, 1996.

(D) The separation distance from the bottom of the existing or proposed swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility to groundwater is less than 10 feet.

(2) Each operator of a swine facility meeting the requirements of paragraph (b)(1) of this regulation and proposing to use a swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility shall propose site-specific groundwater protection measures for the secretary's consideration for approval.

(c) Each new or expanded portion of a swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility other than those described in subsections (a) and (b) shall be located a minimum of 10 feet above the static groundwater level, as measured from the lowest elevation of the finished interior grade of the swine waste-retention lagoon or pond, the swine waste management system, or the waste

treatment facility. Each swine operator of or permit applicant for a swine facility shall notify the department at least two days before performing any site investigations to determine the static groundwater level at the site.

(d) Each swine operator or permit applicant shall ensure that each liner for a new or expanded portion of a swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility meets the following requirements:

(1) If the new or expanded portion of the swine waste-retention lagoon or pond, swine waste management system, or waste treatment facility is not located over the Equus Beds or in a sensitive groundwater area, the materials used for the liner shall have a seepage rate of no more than $\frac{1}{4}$ inch per day, except as required by K.S.A. 65-1,181, and amendments thereto.

(2) If the new or expanded portion of the swine waste-retention lagoon or pond, the swine waste management system, or the waste treatment facility is located in a sensitive groundwater area, the materials used for the liner shall have a seepage rate of no more than $\frac{1}{10}$ inch per day.

(3) If the new or expanded portion of the swine waste-retention lagoon or pond, the swine waste management system, or the waste treatment facility is located over the Equus Beds, either an impermeable synthetic membrane liner shall be used or the material used for the liner shall consist of either of the following:

(A) Two or more layers of compacted soil designed to have a seepage rate of no more than $\frac{1}{10}$ inch per day. To demonstrate that this seepage requirement is met, the soil liner seepage rate shall be determined within 12 months of placing the swine waste-retention lagoon or pond, the swine waste management system, or the waste treatment facility into operation. The test method used shall be the whole pond seepage test; or

(B) any material that has been approved through the variance process in accordance with K.A.R. 28-18a-25.

(e) Each permit applicant or operator that conducts testing to determine the seepage rate shall submit four copies of the test results to the department.

(f) For the purpose of K.A.R. 28-18a-1 through K.A.R. 28-18a-33, an imminent threat to public health or the environment may be deemed to exist if physical, chemical, biological, or radiological substances or a combination of these substances is released into subsurface waters of the state and

results in a concentration or amount of a substance in excess of the numerical criteria designated for aquatic life protection, agricultural use, or public health protection as provided in the "Kansas surface water quality standards: table of numeric criteria," dated December 6, 2004, which is adopted by reference in K.A.R. 28-16-28e. If the background concentration of a substance is naturally occurring and is greater than the numerical criterion, the background concentration shall be considered the criterion. (Authorized by K.S.A. 2005 Supp. 65-171d; implementing K.S.A. 65-164, K.S.A. 2005 Supp. 65-171d, and K.S.A. 65-171h; effective March 16, 2007.)

Article 19.—AMBIENT AIR QUALITY STANDARDS AND AIR POLLUTION CONTROL

AMBIENT AIR QUALITY STANDARDS

28-19-1. (Authorized by K.S.A. 65-3001, 65-3005, 65-3010; effective Jan. 1, 1971; amended Jan. 1, 1972; revoked May 1, 1981.)

28-19-2. (Authorized by K.S.A. 65-3005, 65-3010; effective Jan. 1, 1971; amended Jan. 1, 1972; revoked May 1, 1981.)

28-19-3. Reserved.

28-19-4. (Authorized by K.S.A. 65-3005, 65-3010; effective Jan. 1, 1971; amended Jan. 1, 1972; revoked May 1, 1981.)

28-19-5. Reserved.

GENERAL REGULATIONS

28-19-6. (Authorized by K.S.A. 65-3001, 65-3005, 65-3006, 65-3007, 65-3010; effective Jan. 1, 1971; amended Jan. 1, 1972; revoked May 1, 1981.)

28-19-7. (Authorized by and implementing K.S.A. 1994 Supp. 65-3005; effective Jan. 1, 1971; amended Jan. 1, 1972; amended, E-73-8, Dec. 27, 1972; amended Jan. 1, 1974; amended May 1, 1975; amended, T-84-39, Dec. 21, 1983; amended May 1, 1984; amended, T-85-29, Nov. 14, 1984; amended May 1, 1985; amended May 1, 1988; amended Oct. 16, 1989; amended Nov. 22, 1993; amended Jan. 23, 1995; amended Dec. 8, 1995; revoked Oct. 10, 1997.)

28-19-8. Reporting required. The references in K.A.R. 28-19-9 (a) and K.A.R. 28-19-16b to reporting requirements under this regulation,

the reference in K.A.R. 28-19-16b to the information required to be included in a permit application by K.A.R. 28-19-8(a), and any other reference in these regulations to the requirements of K.A.R. 28-19-8, shall be interpreted to require compliance with K.A.R. 28-19-300 through K.A.R. 28-19-304. (Authorized by K.S.A. 65-3005; implementing K.S.A. 65-3005, 65-3007, 65-3010; effective Jan. 1, 1971; amended Jan. 1, 1972; amended, E-73-8, Dec. 27, 1972; amended Jan. 1, 1974; amended May 1, 1975; amended, T-84-39, Dec. 21, 1983; amended May 1, 1984; amended, T-85-29, Nov. 14, 1984; amended May 1, 1985; amended May 1, 1988; amended Oct. 16, 1989; amended Jan. 23, 1995.)

28-19-9. Time schedule for compliance.

Except as otherwise noted in specific emission control regulations, compliance with these regulations shall be according to the following schedules: (a) All new air contaminant emission sources or alterations to emission sources that are required to be reported under the provisions of K.A.R. 28-19-8(a) shall be in compliance with all applicable emission control regulations at the time that they go into operation. The department may authorize the operation of a new or altered emission source for any additional specified time periods that are required to make necessary adjustments on the equipment before compliance can be demonstrated. This authorization shall be granted only at the request of the operator and under conditions that are approved by the department.

(b) Any air contaminant emission source that was operating, under construction or under purchase contract on January 1, 1971, and that has not previously been required to comply with any emission control requirement in these regulations shall comply with that emission control requirement or those requirements within 180 days after the department notifies the owner or operator that the emission source is required to be reported under the provisions of K.A.R. 28-19-8(a).

(c) The owner or operator of any portable stationary air contaminant emission source that has been issued a permit under K.A.R. 28-19-14 and which is moved to another location within the state shall report the move to the department, in writing, at least 10 days before the source commences operation at the new location. The report shall identify the equipment being moved, describe the old and the new location, indicate the